

Australian Forest History Society

Newsletter No.98

August 2026

"... to advance historical understanding of human interactions with Australian forest and woodland environments."



Eucalyptus globulus.

Illustration by Pierre-Joseph Redouté, 1800.
Plate 13 accompanying Jacques Labillardière, 1800.
Relation du Voyage à la Recherche de la Pérouse.

Image courtesy of Real Jardín Botánico, Biblioteca Digital, Madrid, Spain
<https://bibdigital.rjb.csic.es/viewer/13338>

See "Eucalypts of the Bibbulmun Track, Western Australia – Part 3"
pp23-26, in particular p25.



MEMBERSHIP

Membership of the Australian Forest History Society (AFHS) Inc is A\$25 a year for Australian and New Zealand addressees or A\$15 a year for students. For other overseas addressees, it is A\$30.

These prices do not include GST as the AFHS is not registered for paying or claiming GST.

Membership expires on 30 June each year.

The preferred payment method is by Electronic Funds Transfer paid into the following account:

Commonwealth Savings Bank
BSB 062 911
Account No: 1010 1753

Please either return this form if you pay by EFT, or send an e-mail to the Treasurer advising that you have joined/ renewed, particularly if your contact details have changed – fintan_olaighin@yahoo.com.au.

IN THIS ISSUE

Editor's Note	2
Australian Imperial Force Forestry Units in New Guinea	3
The Anzac Flagpole and Reserve at Petone Railway Station	7
WA Forest History on YouTube	10
Forestry Tales Website	10
ANU Forestry Reunion – Graduation Year 1986 ..	10
A Forest that Grew Because People Came	11
Robert Onfray's Blogs, Books and Other Writing .	20
TPNG Forestry – July Reunion in South East Queensland	20
Forest Yarns – Aboriginal Connections	22
Eucalypts of the Bibbulmun Track, Western Australia – Part 3	23
Books and Publications	27

Name:	
Address:	
Tel:	
Fax:	
E-mail	

☐	Please mark the box if you would like a receipt – otherwise an acknowledgment will be sent by e-mail.
--------------------------	---



NEXT ISSUE

The newsletter is normally published three times a year, with the occasional special issue. The next issue should be out in December 2026.

Input is always welcome.

Contributions can be sent to
fintan_olaighin@yahoo.com.au.

Contributions may be edited.

EDITOR'S NOTE

I'll start this column with an apology to two contributors – Graham McKenzie-Smith and Michael Roche – for neglecting to send their articles to Peter Evans for the April issue. Both have a military theme, one specifically on Anzac Day, and would have been very appropriate for inclusion in our April newsletter. I also apologise to Peter Evans as my oversight meant that he had to write more articles than he would have perhaps liked in order to fill the issue. Both articles are included in this edition.

On the point of contributions to the newsletter, a reminder that they are always welcome. Forest history is a very broad remit, so there's plenty of scope to get something published. Sometimes articles get overlooked or get lost in transmission, so if you have sent something that hasn't been published, please re-send it to me at fintan_olaighin@yahoo.com.au.

In addition to the articles from Graham and Michael, we also have a long article from Robert Onfray on the Pilliga Scrub, a couple of articles that AFHS members Michael Bleby and Tony Ford have posted on websites, as well as one from Jack Bradshaw on YouTube videos, a couple of articles on reunions – one held in July and one to be held in November – and the third and final part of my article on eucalypts of the Bibbulmun Track in Western Australia.

Our annual general meeting is approaching. A date hasn't been set, but is likely to be held in Canberra in November. All AFHS members are invited to nominate for a committee position – it's been a while since we've had a full committee and activities are falling to a small number of people.

And finally, thanks to Juliana Lazzari for her help with this issue.

AUSTRALIAN IMPERIAL FORCE FORESTRY UNITS IN NEW GUINEA¹

By Graham McKenzie-Smith

Introduction – Forestry Production Units

Early in World War Two, the British asked Australia to supply companies of trained foresters, loggers and sawmillers to avoid the wastage of timber resources that had occurred in World War One, and Australia raised two forestry companies in March 1940. They moved to England and a third company was raised in March 1941, along with a group HQ. These were production companies, equipped to build logging roads and tramways, harvest and transport logs and saw them to produce a range of sawn timber and associated products. Their operations in England and Scotland are described elsewhere.² They returned to Australia in late 1943 and after their leave, the group concentrated at the RAE Training Centre at Kapooka (NSW). In May 1944 2/1 CRE (Forestry), 2/2 For Coy and 2/3 For Coy left for New Guinea, arriving at Lae on 27 May. 2/1 For Coy worked in the Northern Territory before reaching New Guinea in April 1945.

2/1 CRE (Forestry)

This unit had evolved from the *Forestry Group HQ* and with four officers and 17 Other Ranks (ORs), was commanded by Lt Col Cyril Cole, formerly Chief Forester in the ACT. They established their HQ at Yalu, in the Markham Valley, north west of Lae. In Britain, the group HQ had been necessary to command the scattered sawmilling companies as there was no other Australian HQ in the country. However, in New Guinea the companies were deployed under the various Base Area HQs and the CRE had only a loose technical control over the companies. On 9 August Lt Col Cole recommended that "... due to the reduced functions of CRE and in the interests of manpower 2/1 CRE (Forestry) be disbanded forthwith". After due process, the recommendation was approved. Lt Col Cole left for discharge on 21 November, the staff were reassigned and the War Diary³ closes on 30 November.

2/2 Forestry Company

The five officers and 153 ORs of 2/2 For Coy formed three platoons with Maj Andrew Benallack as Officer Commanding (OC).⁴ The personnel arrived at Lae on 27 May without their main equipment, so they initially concentrated at Yalu. On 3 June, a detachment from 1 Pl under the 2ic Capt Bert Parke, moved to Labu to harvest piles and, by the end of the month, most of 1 Pl were so engaged under Lt Bert Lipscombe. On 15 June, Lt Bill Brown took an advance party from 3 Pl to Wau and the platoon was concentrated there by the end of the month, working a sawmill that had been constructed by

52 Fd Pk Coy. The unit's equipment reached Lae on 8 July. Capt Parke took a detachment from 2 Pl to Karkar Island (off Madang) in early July to harvest an urgent pile order, and the rest of 2 Pl arrived later that month to take over construction and operation of a sawmill from 55 Fd Pk Coy. In August, the company was reorganised so that the platoons could work independently and, on 18 August, 1 Pl rejoined CoyHQ at Yalu. 3 Pl also withdrew from Wau on 9 September ready for a new assignment.

2 Aust Corps had taken over operations on Bougainville Island from XIV US Corps and were to advance north and south from the base at Torokina. 3 Pl of 2/2 For Coy was assigned to move to Torokina where Lt Brown and an advance party moved later in September. The rest of 3 Pl joined them in October. With one officer and 39 ORs, they worked a US-constructed sawmill producing up to 300,000 super feet (900 m³) of sawn timber a month. By February 1945, they were operating a double shift with extra men attached from 5 Army Tps Coy. In March, they started work on constructing a new sawmill which was handed over to 7 Army Tps Coy to operate in May. A new road constructed by the platoon in June opened up a new stand of Terminalia which would keep the sawmills operating for several months. The US sawmill was officially handed over to the Australian Military Forces on 25 June.⁵ VP Day was celebrated at Torokina (Bougainville) with a huge concert by Lancashire singer Gracie Fields on 16 August 1945 and seven tickets were made available for 3 Pl.

2 Pl had been harvesting piles and working the sawmill on Karkar Island since July; they ceased operations in mid-September, moving to Madang where they staged waiting transport to Aitape. Here 6 Aust Inf Div had relieved XI US Corps, holding the perimeter around the Aitape airfields, but they planned to advance east to capture Wewak. The advance party reached Aitape in October and 2 Pl was complete by November. Their new sawmill was operational by 21 November with 20 natives attached in the mill and a further 20 in the logging crew. The separate War Diary⁶ of 2 Pl of 2/2 For Coy ceases in May 1945 but other information indicates they continued to work at Aitape until VP Day.

CoyHQ and 1 Pl remained at Yalu until November 1944 with detachments from 1 Pl harvesting piles from the Labu area. When Australian troops were to relieve US units in New Guinea, 5 Aust Inf Div was allocated to relieve 40 US Inf Div which was at the western end of New Britain, but they chose to establish a new base at Jacquinot Bay which was closer to the main Japanese force at Rabaul. In November, CoyHQ and 1 Pl moved forward to Jacquinot Bay with six officers and 63 ORs,⁷ establishing their camp and sawmill near Cape Cunningham. They commenced sawmilling operations on 27 November. Logging areas included around Waterfall Bay and along the Bairiman River. Sawmill

¹ Ashort glossary explaining the various terms – Corps, Division (Div), Company (Coy) and Platoon (Pl) is on p6.

² Justin Chadwick, June 2018. "The Men Behave Well and are a Credit to Australia: Australian Forestry Companies in the UK during WW2", *Sabretache*, Vol. LIX No. 2, Military Historical Society of Australia.

³ War Diary 2/1 CRE (Forestry) AWM52 5/32/1.

⁴ War Diary 2/2 For Coy AWM52 5/32/4.

⁵ War Diary 3 Pl, 2/2 For Coy AWM52 5/32/4/7 & 8.

⁶ War Diary 2 Pl, 2/2 For Coy AWM52 5/32/4/6.

⁷ War Diary HQ & 1 Pl, 2/2 For Coy AWM52 5/32/4/3, 4 & 5.

operations were assisted by sappers attached from 10 Fd Coy and a native contingent. In June, men from a New Zealand air force mobile sawmill unit were attached, and the sawmill was worked on a double shift until VP Day.

2/3 Forestry Company

The six officers and 152 ORs of 2/3 For Coy formed three platoons with Maj Merv Rankin as OC.⁸ The personnel arrived at Lae on 27 May without their main equipment so they initially concentrated at Yalu. On 3 June, they took over the large Busu sawmill which had been built by 59 Corps Fd Pk Coy and 14 Fd Coy and was being operated by 2/23 Corps Fd Pk Coy. After their equipment arrived, they established their portable sawmill (Moe Sawmill) nearby and it was operational by 24 July, by when the Busu mill was operating on a double shift.

In August, the unit was reorganised from working a large Class A sawmill to be independent platoons, capable of operating smaller Class B & C mills.⁹ Crews were withdrawn from Busu mill to construct another Moe sized mill (Class C) and a larger Class B mill, with detachments from 8 Army Tps Coy sent to keep the Busu mill operating. The new Butibum mill (Class C) was operational by 5 September and work commenced on the Unthank mill (Class B). This was ready in 19 days and set up in the Munim bush. With the Busu bush depleting, construction started for a new Class A mill at Munim. CoyHQ moved to Munim in December and, by January 1945, 2/3 For Coy concentrated at the Munim and Unthank mills, while Busu mill was closed, Moe mill was idle and Butibum mill was being operated by 8 Army Tps Coy and 20 Fd Coy.

To support the Borneo operations of 1 Aust Corps, Morotai was developed as a forward base and, in June 1945, 1 Pl (Lt Doug Munro and 44 ORs) moved to Morotai. Initially they were cutting piles for wharf construction and in July they built a sawmill cutting 50,000 sft (150 m³) per week. Back at Lae, 2/3 For Coy was reduced to four officers and 99 ORs and concentrated on operating the Munim mill. Sawing continued to VP Day.

2/1 Forestry Company

2/1 For Coy had been sent to the Northern Territory in July 1944 where they operated at McMinns Siding before returning to Kapooka in December. In April 1945, they arrived at Lae where 2 Pl and 3 Pl established their portable sawmills at Yalu. After 6 Inf Div had captured Wewak in May, an urgent sawn timber order was despatched and 1 Pl prepared to move there. On arrival, they found no standing timber for milling so installed a resawing plant and used their equipment to handle engineer stores from landing barges to the RAE dump. Their milling equipment was returned to Yalu in August but 1 Pl continued on non-forestry duties at Wewak. The 2/1 For Coy War Diary¹⁰ ceased after July 1945.

After the Japanese Surrender

11 Inf Div at Jacquinot Bay formed the occupation force which moved to the Japanese base at Rabaul to supervise the surrender. CoyHQ and 1 Pl of 2/2 For Coy was warned on 27 August to prepare to move to Rabaul but remained at Jacquinot Bay. Soldiers were generally returned to Australia for discharge based on a priority points system. In December, low priority sappers were transferred out of 2/3 For Coy at Lae to be replaced by high priority sappers from other engineer units and they left on HMAT *Duntroon*. Similarly 2/1 For Coy left in December. At Morotai, 1 Pl of 2/3 For Coy ceased operations on 26 December and the men were transferred to other units, some to be returned to Australia, some to remain until later. 2/2 For Coy was to remain at Jacquinot Bay to supply sawn timber to Rabaul and 2 Pl arrived at Rabaul from Aitape in November. At Torokina, the high priority sappers were transferred to other units and 3 Pl of 2/2 For Coy was brought up to strength with low priority sappers and warned to move to Rabaul. However, in January 1946, they were made redundant and left for the mainland. At Jacquinot Bay 2/2 For Coy received a letter from the Queensland Forestry Department offering jobs and this was displayed on unit noticeboards. CoyHQ and 1 Pl of 2/2 For Coy continued to produce sawn timber for Rabaul until 18 January when the sawmill was destroyed by fire, so they packed up and left. 2 Pl operated their sawmill at Rabaul until March 1946.

Introduction – Planning and Assessment Units

In January 1944, General Blamey as Commander-in-Chief directed the formation of what he called the NG Forest Service RAE. Under the Engineer-in-Chief, the Forest Service would "perform in New Guinea those functions normally carried out by a civil forest service". These included survey and allocation of areas to be milled by Australian and allied units, as well as collection and maintenance of forestry information in a manner suitable for handing over to a future civilian forest service. They could take advantage of the air survey and other work done by the allies in New Guinea to map and assess the forest resources for future use. As a result, 2/1 CRE (NG Forests) was formed along with two forest survey companies.

2/1 CRE (NG Forests) was to have eight officers and 30 ORs. The officers included the Commanding Officer, 2ic, Adjutant, Forester, Surveyor, Botanist, Air Photo Specialist and Statistician. The two forest survey companies each had six officers, including the OC, 2ic, two Foresters, a Surveyor and an Air Photo Specialist. The 26 non-commissioned officers (NCOs) included the Company Sergeant Major, four Warrant Officers and four Sergeant Foresters, two Warrant Officers and two Sergeant Surveyors, as well as five other specialist sergeants, three general sergeants and five corporals. Thirty sappers and sixty natives completed the establishment. They were initially organised with company HQ, a survey platoon and an assessment platoon, but evolved to form two assessment platoons which would work as detached sections. After using

⁸ War Diary 2/3 For Coy AWM52 5/32/5.

⁹ A Class A mill had a capacity to produce 85,000 super feet (250 m³) per week, Class B 70,000 sft (210 m³) and Class C 20,000 sft (60 m³).

¹⁰ War Diary 2/1 For Coy AWM52 4/32/3.

aerial photos to map forest types, the main assessment technique used strip surveys where each tree along the strip was measured and forest type boundaries confirmed leading to a resource volume estimate. In the more productive forest types, sample plots were measured in more detail and along the way foliage and other samples were gathered for identification.

2/1 CRE (New Guinea Forests)

Formation of 2/1 CRE (*NG Forests*) was approved on 2 March 1944¹¹ and Jim McAdam, who had been Chief Forester in the pre-war New Guinea, promoted to Lt Col as CO and Capt Max Jacobs appointed as Staff Officer (Forestry) at Land HQ at Brisbane. By the end of the month, men with tropical and other forestry experience, as well as old New Guinea hands, had joined the unit at Port Moresby. They moved to Lae on 30 April and the survey companies started to form at Yalu in May. The initial officers were Lt Col Jim McAdam (CO) Maj Jack Thomas (2ic), Capt Alan Walker (Adj), Capt Don Smith (For), Capt Charles Fox (Svyr), Lt Lindsay Smith (Botanist), Lt Les Carron (API) and Lt Charles Hebblethwaite (Stats). Officers sometimes rotated between the units and one of the later arrivals was Capt Norman Hall as Adjutant and to assist with wood technology and air photo interpretation.

An intensive school was held at Lae in July for officers and senior NCOs when Cyril White (Queensland Government Botanist) and Eric Dadswell (Wood Technology Specialist with CSIR) passed on their expertise. While the new forest survey companies trained around Yalu, McAdam and some of the experienced foresters conducted reconnaissance surveys in the recently recaptured areas around Madang and the Ramu Valley. When Australian troops were to relieve American units at Aitape, on New Britain and Bougainville in late 1944, McAdam carried out more reconnaissance missions before allocating the survey companies.

An important role was the recording, analysis and storage of foliage and other samples from trees and other tropical vegetation which were collected by assessment teams, or during specific collecting expeditions into new areas. New species were identified and described, with samples sent back to mainland herbariums and added to the unit's collection. At the end of the war, this became the foundation collection for the PNG National Herbarium at Lae. A small sawmill was established to cut the wood samples used for strength and durability testing and for addition to the wood sample collections in Australia. The Forest Products Research Centre's collection at Hohola is derived from the wartime collection. 2/1 CRE (*NG Forests*) also established a tree nursery to produce seedlings for "beautification" around Lae and many mature trees around modern Lae and in the National Botanic Gardens were planted at this time. 2/1 CRE (*NG Forests*) also collected and collated the monthly production returns from the many sawmills operating in New Guinea. In August 1944, mill returns were collected from nine Australian Army sawmills, four

operated by the Australian New Guinea Administrative Unit (ANGAU) and four by US units. This allowed for the later compensation payments to the traditional owners. The detailed reports produced by the forest survey companies and the statistical collection was handed over in 1946 to the new PNG Forests Department, headed by Jim McAdam who returned to his previous position.

2/1 Forestry Survey Company

The company was formed at Yalu on 14 May 1944¹² with Maj Bill Suttie as OC. Over the next few weeks, he was joined by Capt John Ecclestone (2ic), Lt Harry Luke (For), Lt Tom Packhouse (For), Lt George Dovers (Svyr) and Lt Stan Fendley (API). Although the war establishment was for 61 ORs, the unit rarely exceeded 40, although most of the NCO positions were filled, often by sappers on higher duties. The first month was spent establishing the unit and camp and training before 1 Pl (*Svy*) was deployed to survey the Lae to Nadzab road. Detachments then assessed the forest around Narkapor for poles and piles and around the Munim area which was to be exploited by a new 2/3 For Coy sawmill. In November, they assessed the area between the Busu and Burep Rivers, moving to a new camp north of Malahang airfield.

In January 1945, detachments went to Salamaua, Finschhafen and Madang to carry out more detailed assessment around potential sawmill sites and then more widely in the districts. With 5 *Inf Div* to relieve US troops on New Britain, they established their base at Jacquinot Bay and 1 Pl moved there in February. After assessing the forest around the base, parties followed the forward troops to Wide Bay assessing the forest while others surveyed the coastal forest on the south coast as far as Ania River. In March, the Finschhafen section moved to Gasmata to assess the north coastal forest and advanced to Montagu Harbour. The Madang detachment assessed the south coastal forest as far east as Sidor before transferring to Cape Hoskins in April.

CoyHQ moved to Nantambu in April on the north coast of New Britain and sent a detachment to assess the coastal forests west towards Cape Hoskins. After meeting the Jacquinot Bay detachment at Montagu Harbour, the Gasmata detachment crossed the island to Cape Hoskins before rejoining CoyHQ at Nantambu. The Jacquinot Bay detachment returned to their base to carry out more detailed assessments around Wide Bay. By August, coastal forests in the central area of New Britain (east of the line Gasmata to Cape Hoskins, but excluding the Japanese held Gazelle Peninsula) had been surveyed, mapped and documented, and plans were prepared for a move to Cape Gloucester and Arawe to complete the western end of the island.

After the Japanese surrender, 11 *Inf Div* moved to Rabaul to supervise the repatriation of the 90,000 Japanese. CoyHQ and 2 Pl moved to Rabaul in September from where they assessed the Kerevat resource. A detachment was sent to Talasea for assessment which returned in

¹¹ War Diary 2/1 CRE (*NG Forests*) AWM52 5/32/2.

¹² War Diary 2/1 For Svy Coy AWM52 5/32/6.



October when the company came together at Rabaul. The high priority sappers were released to return to Australia and low priority sappers replaced them until *1 For Svy Coy* was declared redundant in October. The remnants of the unit left Rabaul on 8 December to disband at Wallgrove.

2/2 Forestry Survey Company

The company commenced operations at Yalu on 18 May 1944¹³ with Maj Bert Head as OC. Over the next few weeks he was joined by Lt Bert Jones (2ic), Lt Jim Cavanaugh (For) and Lt Adam Mullholland (Svyr), while Lt John Talbots (Svyr) joined later. Through the life of the unit, they never exceeded four officers and 40 ORs, around 60% of their establishment. The first month was spent establishing the unit and camp and training before a detailed survey was done in the harvest area for the *2/3 For Coy* sawmill at Busu. They then assessed the forest around Nadzab for poles and piles and started assessing the forest in the Atzera Range, based at a survey camp at Busu Falls. In September, a party moved to the Aitura Agricultural Station to survey the area and assess the forest.

With *2 Aust Corps* relieving the *XIV US Corps* on Bougainville, *1 Pl* moved to Torokina in November to assess the forest available for *2/2 For Coy* when they took over a US sawmill. Another party moved to Aitape where *6 Inf Div* was relieving *XI US Corps* and *2/2 For Coy* was taking over a sawmill. The company also sent a party to survey the Garagos River forest and assess a sawmill site at Zenag from a survey camp established on the Wau Road.

In February 1945, a party moved to Buna for a specific assessment and the main body of the company moved to Milne Bay. As the *2 Aust Corps* units on Bougainville advanced out of the Torokina base, they were followed by the *2/2 For Svy Coy* parties assessing the forests, although some areas were found to be so affected by shrapnel from previous bombing attacks that the good timber could not be used. The Aitape detachment moved to Manus Island in March and the Buna detachment joined *CoyHQ* at Milne Bay. Parties from the unit at Milne Bay worked their way around the bay assessing the coastal forests and along the south coast as far as Mullens Harbour, as well as assessing the offshore islands.

The Manus Island detachment moved to the newly captured Wewak in May, while the Bougainville detachment moved to Wau to start on a major project of mapping and assessing the Hoop Pine resource. Having completed the Milne Bay assessment *CoyHQ* moved to Wau in June and they were joined by the Wewak detachment in July. By then, the Lae to Bulolo road had been surveyed, triangulation had been completed and maps produced. Work at Wau was constrained by shortage of native labour and WO2 Jim O'Brien accompanied an ANGAU patrol in August to recruit labour in the Upper Waria area. By the end of August,

30 miles of strip survey had been completed and field work in Block 1 was complete by the end of September. As the technical personnel left for discharge field work ceased and on 23 November the reduced company joined *2/1 CRE (NG Forests)* at Lae and their war diary ceases.

The AIF Legacy in New Guinea Forests

The presence of qualified foresters in the AIF forestry companies ensured that log harvesting was done with an eye to the future management of the stands. In the 15 months that *2/1 CRE (NG Forests)* operated, they gathered the records of all allied sawmills to ensure suitable compensation to traditional owners of the impacted forests. The forest survey companies left reconnaissance level details of the majority of New Guinea's coastal forest with more intensive assessments of critical areas. They provided the foundation for the future management of a vast tropical timber resource.

Glossary

While it does change over time, the current organisational structure of the Australian Army is Corps (30,000 or more soldiers) / Division (10-20,000) / Brigade (2500-5000) / Battalion (550-1000) / Company (100-225) / Platoon (30-60) / Section (9-16).¹⁴

<i>Aust Corps</i>	Australian Corps – Senior HQ, often two divisions. Also US Corps.
<i>Inf Div</i>	Infantry Division – Australian or US.
<i>CRE</i>	Commander Royal Engineers – An old title taken from Royal Engineers (British Army), used as initials only, an engineer unit commanded by Lieutenant Colonel.
<i>CRE (Forestry)</i>	Commander of Forestry Group in UK and New Guinea.
<i>CRE (NG Forests)</i>	Commander of the Forestry Survey companies in New Guinea.
<i>CoyHQ</i>	Company Headquarters.
<i>Army Tps Coy</i>	Army Troops Company – Construction engineer unit.
<i>Fd Coy</i>	Field Company – Field (combat) engineer unit.
<i>Fd Pk Coy</i>	Field Park Company – Engineer workshop and stores company attached to a division.
<i>Corps Fd Pk Coy</i>	Corps Field Park Company – Larger engineer workshop and stores company attached to a corps.
<i>For Coy</i>	Forestry Company – Production unit, logging and sawmills.
<i>For Svy Coy</i>	Forestry Survey Company.
<i>Pl</i>	Platoon – Sub-division of a company.
<i>Pl (Svy)</i>	Survey Platoon.

¹⁴ Australian War Memorial, 2026. "The Australian Army Structure". www.awm.gov.au/learn/understanding-military-structure/army/structure

¹³ War Diary *2/2 For Svy Coy* AWM52 5/32/7.

THE ANZAC FLAGPOLE AND RESERVE AT PETONE RAILWAY STATION

By Michael Roche

On the first Anzac Day in New Zealand in 1916, a cross was erected on Mount Maunsell/Tinui-Taipol at Tinui in the Wairarapa, and at Petone Railway Station 15km out of Wellington there was a well-attended flag raising ceremony featuring Australian and New Zealand flags plus the Union Jack.¹ Both locations are Category 1 sites on the Heritage New Zealand register. The background to the flag raising has a timber-related story.

The initiative for the flag raising event came from Hornsby Railway station staff in Sydney who, as a matter of course, gave an Australian flag to those staff members who volunteered for service in the armed forces. In addition to which, the station displayed the flags of all the allies. In November 1915, Hornsby Railway Station guard Mr Tom Stone (President of the Hornsby Railway Association) realized the New Zealand flag was missing and was able to obtain one from New Zealand Railways. A more symbolically rich scheme was then arrived at by the Hornsby staff and agreed to by New Zealand Railway management. This involved a simultaneous flag raising ceremony.² The chosen station in New Zealand was Petone, also the location of a large railway workshop, and arrangements were put in the hands of the Petone Workshop's Patriotic Committee. Railways presented the New Zealand flag to be unfurled alongside a Union Jack and Hornsby workers sent an Australian Red Ensign. The three flags each measured 20ft by 10 ft (6.1m by 3m).

Initially the date for the joint unfurling was left open but eventually set for Saturday 4 March 1916.³ By early February, however, it was realized that this coincided with the departure of the 10th Reinforcements of the NZ Expeditionary Force and that many of the Petone and Hutt valley residents would congregate in Wellington to see off the troops. Instead, the event was reset for Anzac Day which also changed the nature of the occasion from the war time unity of Trans-Tasman Railway staff to that of a broader social and political event. In 1916 New Zealand had not yet introduced conscription and this Anzac Day ceremony was a mix of remembrance, political resolve, and recruitment. This was not a dawn service but scheduled for 3:30 p.m. to enable the Minister of Railways to attend with over 1200 school children in attendance. The Trentham Military Camp Band played. Senior politicians accepted invitations including Prime Minister W.F. (Bill) Massey, (in peace time notorious among trade unionists for his use of "Massey's Cossacks", special mounted constables to break a

waterside strike in 1913) and Liberal leader Sir Joseph Ward – co-leaders of a wartime national coalition government. Also present was Hon. William Herries, the Minister of Railways, (UK born) who unfurled the Union Jack and other members of Cabinet, as well as Thomas Wilford MP for Hutt, Ernest Hiley (General Manager of Railways), Mayors and many councillors of surrounding local bodies in addition to Colonel Herbert Pilkington, the Adjutant General representing the Defence Department. Station Guard Stone's son Tom jnr. – included in the official party – also spoke.⁴ Both the Petone Unit and Railway Section of the National Reserve were in attendance. Railway employees were granted half a day's holiday on pay to be present. The Borough Council agreed to allow the street to be used for the crowd to assemble.⁵ In the evening there was an interdenominational religious "memorial service" at a nearby Petone theatre followed by a patriotic meeting with speeches, and a collection for the Red Cross.

Of course there could be no flag raising ceremony without a flagpole. There was behind-the-scenes activity involving the Station Master, the District Engineer, and the Foreman of Kaiwharawhara Works Depot beginning in February 1916. The Station Master confirmed that the Petone Railway workshops would supply the pole "complete with fittings".⁶ But he also immediately asked for fencing so that "the ground may be brought under cultivation".⁷ All this took time, and it was not until 7 April that the fence and a gate was organised. It was noted "that the loco engineer will cut and supply jarrah posts and boiler rails on application".⁸ Later correspondence indicates the fenced area was also planted. The flagpole stood at some 60 feet (18.3m) comprised of two 30-foot (9.1m) lengths held together by metal clips. For the remainder of the war, Petone Railway workshop staff lowered the flag when a former workshop employee was killed (10 in total).^{9,10} There was another Anzac Day ceremony at the flagpole in 1918, jointly organised by the Workshop's Patriotic Committee and Petone Borough Council, again centred around the unfurling of the Australian flag raised this time by Herries. Petone school children accompanied by the Trentham camp band sang "God Save the King" and the "Marseillaise".¹¹

⁴ "Exchange of flags. Unique Celebration at Petone Railwaymen's Function", *Dominion*, 26 April 1916, p7.

<https://paperspast.natlib.govt.nz/newspapers/DOM19160426.2.39>

⁵ "Petone Affairs", *Evening Post*, 18 April 1916, p2.

<https://paperspast.natlib.govt.nz/newspapers/EP19160418.2.10>

⁶ Station Master to District Engineer, 8 March 1916, Petone Station – Erection of Flag Pole, R11071488.

⁷ Station Master to District Engineer, 8 March 1916, R11071488.

⁸ District Engineer to Foreman Kaiwharawhara 7 April 1916, R11071488.

⁹ Petone railway station war memorial | NZ History.

<https://nzhistory.govt.nz/memorial/petone-railway-station-war-memorial>

¹⁰ First Anzac Day | NZ History.

<https://nzhistory.govt.nz/page/first-anzac-day>

¹¹ "Petone's Celebration. Unfurling the Flag. In Memory of Gallipoli", *Dominion*, 26 April 1918, p6.

<https://paperspast.natlib.govt.nz/newspapers/DOM19180426.2.42>

¹ J. Douglas, 2011. We will remember. *Heritage New Zealand*, Winter, 10-11.

² Details of the Hornsby ceremony are given in "Unfurling the Flag. Ceremony at Hornsby". *Sydney Morning Herald*, 26 April 1916, p13. <https://trove.nla.gov.au/newspaper/article/15668710/1269146>

³ R. Moore, Secretary Patriotic Committee to General Manager Railways, 18 February 1916. Anzac Day Ceremony Petone Proposing to Exchange Flags with Hornsby Station, R16120107, Archives New Zealand, Wellington.

After 1919 Anzac services at the site ceased but flagpole events were revived from 1953 to 1973.¹² In 1929 with the railway workshops being relocated, the local Petone Beautifying Society approached Railways urging that the department keep the fenced station reserve in tidier condition. The department agreed and passed responsibility onto the station staff. That same year Petone Borough Council approached Railways offering to purchase the flagpole and to re-erect it in an unspecified but what they considered to be a more useful location. Matters lapsed for a time but by 1934 it had returned: "The Mayor (David McKenzie) states that so far as he knows the flagpole is never used".¹³ The department which valued the flagpole at £4 raised no objections but the sale never proceeded after McKenzie's death.¹⁴ Attention also shifted from the flagpole to the surrounding reserve with Petone Borough seeking in 1935 to have control of the 6 perch (152 sq. m) fenced area for "beautifying purposes".¹⁵ This was agreed to with some conditions over signal wiring, and a peppercorn lease was drawn up. The Borough's concern was the railway station was opposite Jackson Street the main entry route to Petone and that the unkempt reserve detracted from the appearance of the suburb. The Borough sought two gallons of paint from Railways for the flagpole and picket fence.¹⁶ In a continuation of the "beautification" work on 29 April 1936, Albert Morgan, the Borough's Assistant Curator of Reserves, was sent to prune and remove some of the vegetation. His report indicated that the original plantings had not been well sited or maintained, some trees were overgrown, others were smothered. His list of the plants he removed were decidedly imperial rather than just Australasian, including three cabbage trees (NZ), one South African silver leaf (*Leucadendron argenteum*), four veronicas (probably NZ), two King palms (*Archontophoenix Alexandra*) from Queensland, one variegated holly – possibly Variegated English Holly (*Ilex aquifolium "Argentea Marginata"*) (though actually endemic to Venezuela). What he left is not recorded but his replanting was decidedly eco-nationalistic: "I intend to replace these trees with Pōhutukawa (*Metrosideros excelsa*), Kowhai (*Sophora microphylla*), and Ribbonwood (*Plagianthus regius*) and any flowering shrubs that are suitable and can be procured".¹⁷ He also proposed to install a concrete kerb and plant perennials. This flurry of activity prompted no less than Mrs Elizabeth Gilmer FRHS, among other things president of the Wellington Horticultural Society and successful lobbyist for reintroducing Arbor Day in 1934, the daughter of former PM Richard Seddon and a

considerable force in local civic affairs, to write querying the apparent level of destruction.¹⁸ The Town Clerk responded reassuringly and was also quoted in the newspapers to the effect that "There was never any intention that the whole of the plantation was to be torn up. All the trees that are to come out are now out, and we will have the whole work finished by the end of the week".¹⁹ Some of Morgan's replantings have survived to today, notably three Pōhutukawa of some 60cm in diameter.

Interest in the flagpole and reserve then lapsed until the early 1950s when, with a Royal tour in prospect, the Station Master at Petone sought to have both reconditioned. The correspondence is dated March 1952: Princess Elizabeth and the Duke of Edinburgh were in Kenya in February on a planned Commonwealth tour when King George VI died. Even though cancellation of the 1952 tour must have seemed obvious, the District Traffic Manager still made a patriotic plea to justify the refurbishment now stressing the Anzac rather than Australian railways connection.

"It has been ascertained that the approximately 60ft high flagpole together with the garden reserve railway property situated at the south end of this station building was dedicated as an Anzac Memorial. The conditions being that the reserve has to be kept in order by the Petone Borough Council and the flagmast and flag by the Railway Department."²⁰

The symbolism of the choice of timbers was now explicitly referred to: "It is understood that one half is Australian and the other New Zealand timber as a symbol of Anzac unity".²¹ But the files are silent on the actual choice of Australian and New Zealand species comprising the flagpole. An unspecified "Australian hardwood" is mentioned in some secondary sources.²² Newspaper reports suggested that the Australian timber comprised the bottom section and the likewise unnamed New Zealand timber the top portion. A timber expert checking a splinter or taking a core sample could decisively solve this conundrum. In the absence of this option, it is necessary to draw more fragmentary and circumstantial evidence.²³

By 1952 the pole needed repainting and new halyards. This work did go ahead, a local photographer capturing

¹² And again, for 1995 with a 7:00AM ceremony - see Gerald Davidson & Sherril McNabb, 2006. *Til the Day Breaks : World War I Memorials in Petone*, Petone Historical Society, Petone, p6.

¹³ Chief Engineer to district Engineer, 6 July 1934, R11071488.

¹⁴ Gerald Davidson & Sherril McNabb, 2006. *Til the Day Breaks : World War I Memorials in Petone*, Petone Historical Society, Petone, p6.

¹⁵ District Engineer to Chief Engineer, 29 June 1935, R11071488.

¹⁶ "Beautification of Railway Reserves", 29 September 1935, Petone Borough Council Reserves Committee Minutes 1927-1938. ARCH17646. Lower Hutt City Archives.

¹⁷ Report on Plantation for Petone Borough Council, 29 April 1936, R11071488.

¹⁸ Bronwyn Labrum, 1998. "Gilmer, Elizabeth May", *Dictionary of New Zealand Biography. Te Ara – the Encyclopedia of New Zealand*.

<https://teara.govt.nz/en/biographies/4g9/gilmer-elizabeth-may>.

¹⁹ "Station Garden-Plot. Removal of Trees Causes Unnecessary 'Scare'. Replanting Intention", *Dominion*, 30 April 1936, p15.

<https://paperspast.natlib.govt.nz/newspapers/DOM19360430.2.155.1>

²⁰ District Traffic Manager to District Engineer, 14 March 1952, R11071488.

²¹ District Traffic Manager to District Engineer, 14 March 1952, R11071488.

²² Memorial at Petone railway station | NZ History.

<https://nzhistory.govt.nz/media/photo/memorial-petone-railway-station>

²³ My copy of *Empire Timbers* (1945) suggests that a small splinter of heartwood will burn to an "ashless charcoal" which distinguishes it from Karri. Understandably I have not been tempted.

the scene in July of 1952 when an elaborate scaffolding had been erected for the painters ([Figure 1](#)).



Figure 1: Petone Station Flagpole being repainted in 1952. A crossbar that had enabled the three flags to be flown simultaneously had been removed around 1923. (Source: AAVK 6390 B3155 – Te Rua Mahara o te Kawanatanga Archives New Zealand.)

The above photo also shows the Pōhutukawa, and other shrubs planted by Morgan in 1935, now looking somewhat untidy. The task of repainting appears to have allowed identification of the New Zealand timber. A wooden plaque was first attached to the pole at this time.²⁴ This plaque was replaced by a Formica version in 1961 which in turn was relocated to act as a proxy foundation stone in 1973 ([Figure 2](#)). The Formica plaque repeating the original wording contained the extra information that the New Zealand wood was Kauri (*Agathis australis*) once used for mast and spars and relatively light, particularly compared to Australian hardwoods and so must surely have been formed the top portion of the flagpole. The Australian timber is now described as an "Australian Hardwood".



Figure 2: Formica Plaque dating from 1961. A word-for-word replacement for the wooden original 1953 and earliest reference to the New Zealand timber being Kauri. (Photo by Michael Roche.)

The Royal Tour when it finally took place in 1953-54 included a drive to Petone and Lower Hutt. Presumably

the flags were flying from the mast.²⁵ A more poignant event took place in 1958 when the Australian Railways Bowling team visited the station.²⁶ The flagpole was repaired in 1995 for the 90th anniversary of the Gallipoli landings and refurbished in 2004 at a cost of \$16,000.²⁷ In 2016 the centenary of the unfurling was marked by wreath laying and the raising of the Australian Red Ensign.

But what was the "Australian hardwood"? Approaching this question more obliquely, the *New Zealand Official Yearbook* includes some data on timber imports from Australia. In 1914 logs and hewn logs were imported from New South Wales and Western Australia ([Table 1](#)). Unfortunately, only the value and not the quantity is given. After 1914 the state of origin is omitted but species are included; assuming that the flagpole was formed from logs, then Jarrah, Ironbark, and for our purposes the unhelpful "other" are possibilities ([Table 2](#)). The impact of the war on imports is obvious with the value of Ironbark more than halving from 1915 to 1916 and more so for Jarrah with supplies almost ceasing in 1916. If the pole was made from sawn timber, then Jarrah is the leading single species. To compound the question of identification the actual piece of "Australian timber" was not necessarily imported in 1916 or even in the previous year. In terms of probabilities looking at total imports, the "Australian timber" is most likely Jarrah from Western Australia.

Published Railways data are limited to sleepers laid and replaced by species for regional divisions of the rail network. For the year ended March 1917 some 31,089 Jarrah sleepers (98% of the total) were laid along with 187 of Ironbark on the Main Trunk North Island section.²⁸ This also implies that the Australian wood in the flagpole is most likely Jarrah. If the Railway workshop staff had been interested in the symbolism of the occasion they may, however, have selected a piece of NSW timber for the flagpole given it was NSW railways workers who had initiated the flag exchange, in which case it could be Ironbark.

Table 1: Source of Australian timber imports by State 1914 (£)

Type	VIC	NSW	WA	TAS
Sawn timber undressed	2,965	34,809	144,424	26,290
Logs		16,933	-	-
Hewn logs		93,473	68,476	-
palings		-	-	3,840

Source: New Zealand Official Yearbook 1915.

²⁵ "Busy Day for Queen. Many Engagements in Wellington. No Sign of Strain or Tiredness", *Press*, 12 January 1954, p8. <https://paperspast.natlib.govt.nz/newspapers/CHP19540112.2.41>

²⁶ District Traffic Engineer to District Engineer, 2 January 1958, R11071488.

²⁷ Gerald Davidson & Sherril McNabb, 2006. *Til the Day Breaks : World War I Memorials in Petone*. Petone Historical Society, Petone, p8.

²⁸ The Hon. W.H. Herries, Minister of Railways, 1917. "Railways Statement". *Appendices to the Journals of the House of Representatives*, D2, 24. <https://paperspast.natlib.govt.nz/parliamentary/AJHR1917-1.2.1.5.2>

²⁴ 50th Anniversary of Petone Railway Station Commemorative Flagpole [pamphlet], copy in R16120107. Gerald Davidson & Sherril McNabb, 2006. *Til the Day Breaks : World War I Memorials in Petone*. Petone Historical Society, Petone, p8.

Table 2: Australian Hewn Logs imported into New Zealand (£)

Hewn logs	1914	1915	1916
Ironbark	57532	56380	22386
Jarrah	34588	21310	137
other	16525	32893	13850

Source: New Zealand Official Yearbook 1918.

Inspection of the actual flagpole reveals that the base is squared of 8½ by 8½ inches (21.6 by 21.6cm) perhaps hinting that it was fashioned from a hewn log and is cylindrical upwards from 1.5m. The circumference at this point is 28 inches (71.1cm). More germanely, the paint work on one corner has flaked away exposing a portion of the base that in colour and texture does remind me of the appearance of aged Jarrah railway sleepers (Figure 3). Ultimately more interesting is that Anzac unity while easily enough affirmed in an exchange of flags was also realized by manufacturing the flagpole out of Australian and New Zealand timbers.



Figure 3: Base of Flagpole showing it to be Jarrah? (Photo by Michael Roche.)

Acknowledgements: to Archives New Zealand for permission to produce the photo of the flagpole being repainted in 1952 and Danielle Hanna (Hutt City Council) for facilitating access to Petone Borough Council records.

WA FOREST HISTORY ON YOUTUBE

Jack Bradshaw has sent links to two videos on the Western Australian timber industry:

- "Preserving the Relics of the WA timber industry" (4½ mins)
<https://www.youtube.com/watch?v=waEsJz3sutQ>
- "Whims and Steam Haulers" (8 mins)
https://www.youtube.com/watch?v=_IgS58YX938

Jack's YouTube page is at
<https://www.youtube.com/@jackbradshaw7242>.

FORESTRY TALES WEBSITE

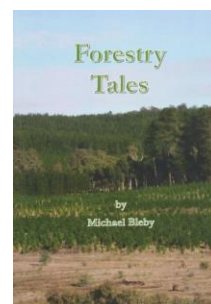


The "Forestry Tales" website was launched in January 2026 and contains short stories written by Michael Bleby, collected over his 40 year career as a forester in South Australia.

Life as an operational forester involved many and varied contacts with people which sometimes had nothing to do with growing trees. These accounts typify the interesting and unusual incidents and events that arose during everyday life on a Forest District.

Michael graduated in Forestry from ANU in 1970 and worked in the SA Radiata Pine industry for 40 years, in the South East, the mid North of SA and the Mount Lofty Ranges. His career spanned all aspects of forest operations, fire protection, and nursery management. He was District Forester at Mount Crawford and at Mount Burr during the extensive replanting of the 1983 Ash Wednesday fire area. Subsequently he worked in Operations Development, Harvesting and Sales, in the Green Triangle. After retiring, he lectured in Forest Operations for Southern Cross University, served on the South East Natural Resources Board, the SE Water Conservation & Drainage Board – and is a writer of Forestry memoirs.

The first collection of 14 short stories comes from the book *Forestry Tales* which was published in 2020 (see newsletter no. 82, April 2021, p15 – www.foresthistory.org.au/wp-content/uploads/2022/01/afhsnewsletter82.pdf).



The website is at <https://forestrytales.com>. The most recent article is titled "Flying Matches" on how investigating wildfire behaviour has its challenges, described as "a 5 minute read".
<https://forestrytales.com/s/Flying-matches.pdf>

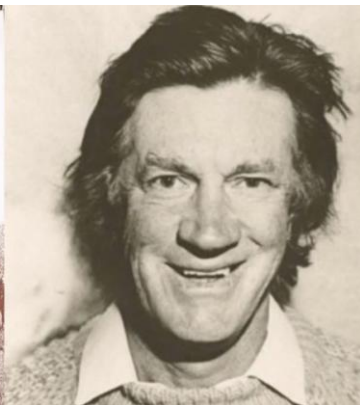
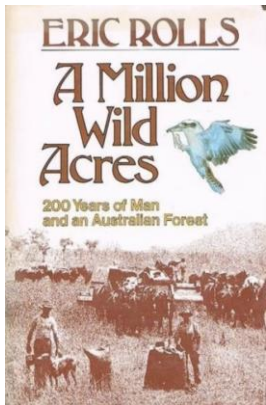
Michael's articles also appear in the AFHS newsletter.

ANU FORESTRY REUNION – GRADUATION YEAR 1986

The ANU forestry graduation year of 1986, is having a 40-year reunion in Canberra on 14 November 2026. I understand that most, if not all, the graduates have been contacted, as well as some staff, but if you haven't received the information, send an e-mail to fintan_olaghin@yahoo.com.au and your details will be forwarded to Paul Wells.

A FOREST THAT GREW BECAUSE PEOPLE CAME

By Robert Onfray



This will be seen as one of the great books about Australia. Eric Rolls gives the history of the forest the laconic power of an extended campfire yarn, spiced with the personal vision that comes from a lifetime of acute observation.

Historian Professor Weston Bate
on *A Million Wild Acres*

Like the Book of Genesis, with its endless 'And Joktan begat Almodad, and Sheleph and Hazarmaveth, and Jerah'... There is a walk-on-walk-off cast of thousands, and the detail is numbing – but this is the Pilliga Book of Genesis, and I think the author was right to put it all in.

George Seddon's book review
of *A Million Wild Acres*, 1982

This isn't a story about untouched nature. It's about ecological succession shaped by culture, animals, law, technology and ideology. It focuses on the Pilliga Scrub in western New South Wales, which sits loosely within the triangle formed by the towns of Narrabri, Coonabarabran, and Baradine.

Modern Australia has fallen in love with a dangerous idea – that our forests are timeless, that what we see today has always existed and that human intervention can only harm the natural world. Nowhere is this belief more deeply rooted or more misleading than in the way green activists now talk about the Pilliga Scrub. We are told it is an ancient remnant forest, scarred by European influence and only saved through reservation and national park status. Its cypress pines are depicted as survivors from a primeval age, its koalas as relics from deep time and its fires as unnatural disasters caused solely by climate change.

Yet nearly every serious historical and ecological line of evidence points in a different, less comfortable direction. The Pilliga, as we understand it today, is not as ancient as it's often claimed to be. It is not a remnant landscape preserved from deep history. In its current form, it is largely a result of European occupation – a forest that grew after settlement, not before.

That idea first reached a wide audience with the publication of Eric Rolls' *A Million Wild Acres* in 1981. The book challenged comfortable assumptions and angered those who needed the Pilliga to be ancient to keep it morally untouchable. Rolls did not describe a

forest that had been destroyed. Instead, he famously called it "the story of a forest which grew up and drove men out". With that single phrase, he changed the moral framework of Australian environmental storytelling. For many, it has been unforgivable ever since.

Importantly, Rolls did not reach his conclusions based on ideology. Instead, he built his case using explorer journals, land records, early cattle and sheep returns, forest inventories, forestry files and physical evidence found in the landscape itself. What resulted was not a minor revision to the accepted story but a direct challenge to the core myth.



Well-managed cypress pine forest near Baradine.

The landscape the explorers saw

When John Oxley moved across the southern edges of what would later be called the Pilliga in August 1818, he didn't describe a dense pine forest. Instead, he recorded open country – apple-tree flats on firm ground and sandy soils with scattered ironbark, box and pine. What impressed him most was how easily he could travel across the landscape, except during floods, when the loose sands suddenly turned to quicksand, making travel treacherous.

This country later became the Yarragin State Forest, now commonly shown as part of a dense pine scrub. Still, nothing Oxley observed matches today's locked pine stands. Early parish plans and selection maps verify his accounts. Pastoral runs were established right across the Pilliga. That alone is significant, because instead of leasing thick scrubland, settlers opted for grasslands and open woodlands.

By 1875, government land records show the district supporting about 25,000 sheep, 30,000 cattle and 10,000 horses. Such figures are unfathomable in today's forests. Trying it now would likely lead to significant losses. Only a landscape mostly made up of native pasture with widely spaced trees could have sustained stock at that level.

In 1877, Forest Ranger James Ward estimated the timber in his district south of Narrabri at one to two mature trees per acre, with about ten young trees – roughly four to 25 per hectare. Compare that to modern densities of hundreds, and often thousands, of stems per hectare. The contrast alone is enough to challenge the myth.

Settlers' lease records reveal the story just as clearly. As the pine spread, the carrying capacity fell. Rather than retreating from grazing, the forest steadily moved across it.

Aboriginal burning and the open woodlands

For tens of thousands of years before Europeans arrived, Aboriginal fire shaped the inland landscapes of New South Wales. Major Thomas Mitchell wrote with surprise at the scale and regularity of Indigenous burning across the western plains. These fires were not destructive, runaway blazes but frequent, cool, controlled burns that kept open woodlands, promoted grasses and kept fuel loads low. Under those conditions, widespread tree regeneration was kept in check.

Historical geographer Denis Jeans later described the vegetation of central western New South Wales as "not natural" in a strict ecological sense, but as actively maintained by Aboriginal fire regimes. What the early Europeans encountered, then, was not a primeval forest, but an open woodland landscape shaped and sustained by human hands through cultural burning.

With European settlement, that system was disrupted. Fire was deliberately excluded or quietly suppressed through intensive grazing, which removed the fine fuels that once supported those low, cleansing burns. With that ecological control gone, the conditions that had kept tree recruitment at bay for millennia were suddenly reversed.

This was the first of the changes that enabled the modern Pilliga to develop.

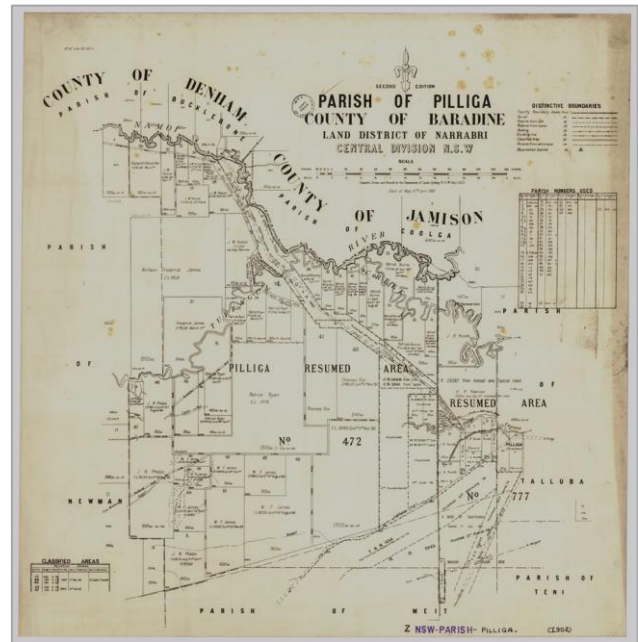
Sheep, soil and the first pine surge

With the settlement came sheep. Their hard hooves compacted the delicate sandy soils, altered species composition and removed the grasses that once sustained regular fires. The combined effects of reduced burning, altered soil conditions and periods of good rainfall created ideal conditions for widespread pine growth.

By the early 1870s, observers noted dense young cypress pines spreading across the country that had previously been open grazing land. This was something they had never seen before. By 1881, the change was so clear that government surveyors were officially instructed to report on the expansion of pine scrub as part of their work.

Evidence presented to the Western Lands Royal Commission in 1901 left little doubt. Witness after witness described once-open country being overtaken by dense pine forests, and carrying capacity dropping sharply. Scrub clearing became an increasing economic burden. In response, the government even introduced special "scrub lands" leases, requiring tenants to clear the regrowth over six years in exchange for secure tenure.

None of this fits the description of an ancient forest. Instead, it describes an ecological eruption where human disturbance rapidly triggered a transformation.



Then came the rabbits

If grazing and fire removal sparked the first major pine growth, rabbits almost shut it down again.

Rabbits arrived in western New South Wales by the mid-1880s, and the good seasons of 1886-1888 caused their numbers to increase dramatically. When drier years followed and grass cover was reduced, the damage became quite severe. In their millions, rabbits ringbarked shrubs, ate seedlings and stripped already weakened pastures down to bare sand. Eric Rolls later documented this destruction in *They All Ran Wild*, describing rabbits as one of the most damaging biological invasions in Australia's history.

Later landscape studies by forester Mark Allen confirmed what the historical record had already shown. After the major regeneration surge of the 1870s and 1880s, pine recruitment nearly ceased for the next fifty years. Allen's sample plots in Nangerybone and Cumbyne State Forests showed that about 80 per cent of the pines alive then had established between 1870 and 1890. There were scattered, widely spaced ancient trees – the old grey ones – and then very little until regeneration picked up again after the 1950s.

Cypress pine breeds in huge numbers, up to a million stems per hectare in some places. In the crowded, nutrient-poor conditions of the Pilliga, the young trees don't compete and self-thin as eucalypts do. Instead, they "lock up". They grow to about two metres high and then stop, only breaking free again if fire, thinning, or disturbance creates space around them. There are pines in the Pilliga over a hundred years old with trunks no thicker than three centimetres.



Old veteran cypress in a paddock at Weethalle.

Forestry enters the Pilliga

By the late 1870s, parts of the Pilliga had already been set aside for timber following the Lands Amendment Act of 1875. Despite this, agriculture still remained a priority over forestry in government policy. Well into the 1890s, new blocks were still being surveyed for clearing and scrubbing within areas already designated as timber reserves.

By the time scientific management finally took hold, the Forestry Commission had inherited a forest already deeply modified. When professional foresters started working systematically in the twentieth century, they found pine in stands so dense that, as one contemporary remarked, "you could not see ten yards through it".



*Completed fire line at Coomore Creek Forest.
SLNSW_FL1894765.*

When Edward Harold Fulcher Swain began his role of District Forester for the North-West District at Narrabri in 1911, the forests he inherited had been marked out of pastoral leases in a haphazard, piecemeal manner going back to the 1880s. Graziers were still permitted to lease these forest parcels under the Crown Lands Acts, as long as they thinned the trees to let the remaining ones grow.

Ringbarking left its own peculiar mark on the landscape. Box trees, unlike pines, coppice after being ringed, throwing up multiple shoots from a dying base. The result was a forest of twisted, multi-stemmed forms – living cemeteries that can still be seen across grazing country today.

Swain quickly began establishing order from the improvised setup. The forests were mapped and divided into manageable blocks. Roads and tracks were built, accommodation was provided and fencing was erected to manage stock. Strip assessments were carried out to count trees and measure timber volume by diameter class. Working plans were formulated, with white cypress pine identified as the main commercial species. Thinning prescriptions based on ringbarking were developed, along with calculations for the allowable cut in each forest. By 1921, over 350,000 hectares had approved working plans.



*Men at work thinning cypress, Merebene Section.
SLNSW_FL1908758.*



*Increment plot thinned Merrinindi Forest.
SLNSW_FL1905167.*

Timber Stand Improvement efforts thinned the dense regrowth and opened the canopies. Defective stems were taken out. Over time, structure, access and a degree of ecological balance were restored. By the mid-twentieth century, the Pilliga supported a sustainable timber industry alongside grazing and wildlife. This transformation was achieved through deliberate, ongoing forestry work.

Foresters repurposed what many saw as worthless scrub into a valuable natural resource. One of the deeper ironies of Australian environmental politics is that this very success later became an argument for abolishing forestry altogether.

Even during this period of recovery, uncertainty hung over the future. Throughout the 1920s and 1930s, rabbits pushed the cypress resource to the brink of exhaustion. Regeneration was heavily grazed out, and concern about the long-term timber supply grew.

At the same time, the initial optimism about growth rates was unfounded. In 1914, it was believed that white cypress could increase by about 1.1 centimetres in diameter annually, allowing it to become a commercial tree in under thirty years. By 1918, updated measurements reduced that estimate to just 0.25 centimetres per year.

With little regeneration occurring and growth far slower than anticipated, the immediate outlook for the sawmills appeared bleak.

Geomorphology, sand, and the uneven forest

One key nuance is that the Pilliga has never been a uniform forest. Its structure, productivity and management history reflect how ancient river systems deposited the sandplain. The thickest, deepest sands were laid down towards the north and west, where drainage was freer and soils were better suited for sustained cypress growth. These areas produced the most vigorous stands and, later, the most commercially valuable timber such as white cypress and grey ironbark.

In contrast, the eastern and southern margins of the Pilliga are underlain by shallower, heavier, less stable soils. Cypress still invaded these areas after European settlement, but growth was poorer and timber quality lower, supporting inferior black cypress and narrow-leaved ironbark. As a result, forestry activity was focused on the deeper sand country to the north and west. That's where roads, firebreaks, working circles and thinning programs were most fully developed.

It was in the poorer areas that forestry practices were limited. Few roads were constructed, access remained poor, firebreaks were sparse and systematic silviculture was uncommon. These regions were considered marginal because they were less productive and more difficult to manage.

When large fires later swept through the east and south, burning fiercely, they were viewed as signs of the climate crisis or as proof of vulnerability. But these were areas of the Pilliga where fuel had accumulated over decades without thinning, access, or mosaic management.

The best forests on the deeper northern and western sands had, in fact, been the most intensively managed, structurally open and biologically diverse. Ironically, they were also the areas that demonstrated most clearly that management was effective.

The second surge: myxomatosis and regrowth

Then came myxomatosis. Introduced in the early 1950s, it caused rabbit numbers to plummet almost overnight and the ecological impacts were immediate and obvious.

Pine regeneration surged once again. In areas where foresters had opened the canopy through thinning, young pines quickly flooded in, filling spaces that had been cleared or degraded. By the mid-1960s, this second wave of regrowth was transforming large areas of western New South Wales, including the Pilliga.

This pattern is significant because if climate alone controlled regeneration, a 50-year gap would be difficult to explain. But once rabbits are brought back into the picture, that long pause becomes completely understandable.

An interdepartmental inquiry later concluded that the emergence of this new scrub was:

A natural feature of the environment occurring as the result of a combination of several factors and accentuated by the absence of natural fires.

In other words, it reaffirmed what the 1901 Royal Commission had already recognised, that the pine scrub was not ancient – it was the result of human and ecological disturbance.

New forest assessments were conducted, and comparisons with previous surveys enabled foresters to update diameter distributions and recalculate growth rates. In some forests, increment plots were set up to monitor tree growth more accurately.



*Clearing and thinning on Narrabri/Kenebri Road.
SLNSW_FL1907085.*

By the 1960s, the assessment and planning system had experienced significant changes. Strip surveys were replaced by ongoing forest inventory plots. Computer models were introduced to predict changes in diameter classes over time, and new allowable cut limits were set, reflecting a more scientific approach to sustainable forest management.

All this was important because a post-World War II boom placed high demands on cypress pine. It is one of the hardest of the softwoods and makes an excellent building material, not just because it looks good. It's also durable, shrinks very little and resists termites. In simple terms, Australia's native cypress pine is among the world's finest construction timbers.

Right up until 2005, the forests of the Pilliga employed 180 locals directly and 140 indirectly, harvesting 50,000 cubic metres of cypress annually, plus about 7,000 cubic metres of ironbark for 12 cypress and five hardwood mills. This was carried out sustainably. Trees were logged selectively, with a minimum amount left standing. While thinning of pines was important, limited funds meant that, from the 1980s, it was restricted to high-production areas.



*Cypress mill, Millivindi.
SLNSW_FL1898018.*



*Good load of Cypress pine poles, Baradine Kenebri Road.
SLNSW_FL1905419.*

Reading the forest as an archaeological text

Mark Allen's true insight was to see forests not just as a collection of trees, but as living historical records. Every feature, from a simple stump to a tall pine, shows evidence of human activity. Stumps indicate axe work, logging and silvicultural thinning, while multi-stemmed eucalypts silently carry the scars of ringbarking by graziers trying to improve pasture. The age patterns of cypress pines reveal phases of regeneration followed by

decades of suppression, reflecting grazing pressure, rabbit plagues and changes in fire regimes. Even more subtle clues, like abandoned survey lines, fences and netted rabbit barriers, remain embedded in the landscape, telling their quiet stories.

Allen argued that cypress forests are more than just physical traces of human history. He believed their patterns, density and disturbances served as an archaeological record. In this light, the Pilliga is not a timeless wilderness but a template of human activity and environmental responses over the past 140 years.

George Baur, a longtime silviculturist with the Forestry Commission, reached a similar conclusion after many years of practical experience. Reflecting on the cypress forests, he wrote:

In cypress forests, perhaps more than in any other Australian forests, the stands that we now have are so different from those of pre-European times that the original forests could provide little to guide us in understanding the growth processes of our current stands.

It's a remarkable observation. The Pilliga, often romanticised these days as "natural" or "wilderness", is, in reality, quite different from the open woodlands and scattered pines that existed before European settlement. Walking through these dense, enclosed stands without recognising their human-influenced nature is to mistake a recent ecological experiment for something ancient.

Every locked stand, patch of new growth, overgrown track and stump shows the marks of European grazing, clearing, Aboriginal fire suppression, rabbit impacts and later forestry management. The forest is a record, not a relic. It tells a recent story, not a primordial one.

Reservation, rewriting, and the academic struggle for the Pilliga's past

By the 1960s, the Pilliga was no longer primarily regarded as a working forest shaped by use, disturbance and repair. It was increasingly seen as something to be reserved. The first formal step in that direction occurred in 1967 with the dedication of the Pilliga Nature Reserve in the poorer eastern section of the Pilliga, which had been simply Vacant Crown Land.

The significant political change, however, occurred in 2005 when New South Wales Premier Bob Carr announced a major expansion of forest reservations across the Pilliga region, protecting around 350,000 hectares. This move came after the signing of the National Forest Policy Statement in 1992, which obliged state governments to establish a "comprehensive, adequate and representative" reserve system through regional forest assessments. Cypress forests had never been a primary political focus of that process, yet the Carr government decided to apply it to the Pilliga anyway, as part of Carr's farewell effort to secure his "greenest Premier" legacy.

It was put to Carr at the time that his reserve targets could be achieved without risking the cypress sawmilling industry. That option was not pursued. Instead, the

government agreed to all the demands made by environmental activists and paid around \$80 million in compensation to industry.

Public justification heavily emphasised koalas and expanding protected "wilderness". Meanwhile, the significant compensation was a clear contradiction that was seldom acknowledged. A forest seen as pristine still required payments to those who were supposedly never meant to be there.

It was during this period that the modern myth of the Pilliga as a surviving remnant of pre-European forest hardened into political fact. Preservation groups, such as the National Parks Association and the Western Conservation Alliance, promoted the Pilliga as the largest remaining patch of native forest in the largely cleared Brigalow Belt South Bioregion. They argued it should be officially recognised as a National Biodiversity Hotspot.

The language was reverent and absolute. What was described as a fragile remnant of ancient time was, in fact, something quite different – a young, disturbance-driven forest that had largely formed after European settlement.

Bob Carr became the public face of this transformation. "Wilderness" was applied to a landscape that had been grazed, logged, ringbarked, burnt, fenced, rabbit-ravaged and silviculturally thinned for over a century. It was a strange kind of wilderness – one still riddled with stock routes, loading ramps, fire lines, coupe boundaries and thinning prescriptions beneath the surface. But the term proved powerful. Repeated often enough, it replaced the working history beneath it. For a largely urban public unfamiliar with the forest's history, the narrative was easy to accept.

It is now widely thought that the reservation "saved" the Pilliga. However, ecologically, it did something far less reassuring. It paused the forest in a temporary, regeneration-focused stage and removed the management practices that had previously stabilised it. Throughout much of the twentieth century, forestry involved thinning dense stands, controlling spacing, reducing ladder fuels and moderating the effects of regeneration pulses.

After the reservation, thinning dramatically decreased and fuels accumulated. Regrowth was locked in once again. The Pilliga, freed from active management but not from disturbance, entered an era of extreme fire behaviour. What was claimed as protection, in reality, amounted to long-term abandonment.

Modern activists still insist that the Pilliga must be "saved" for its wildlife. They highlight the region's remarkable species list: one-third of all Australian bird species recorded here; about 300 native animals; more than 14 frog species; 32 mammals, including 12 bat species; around 50 reptiles; and 22 threatened species – glossy black-cockatoos, regent honeyeaters, turquoise and swift parrots, square-tailed kites, koalas, spotted-tailed quolls, black-striped wallabies, rufous bettongs and others.

It is an impressive catalogue. But it also tells a story that quietly challenges the wilderness narrative. This biodiversity did not survive in a primordial forest. It thrived in a landscape less than 150 years old – a forest shaped, stabilised, opened and diversified by grazing, selective logging, thinning, burning and the systematic silviculture of the Forestry Commission. The wildlife abundance of the Pilliga is a tribute to the success of long-term forest management.

The koala has become the emblem of this narrative. Activists frequently argue that the Pilliga must be locked away to protect it. During the Millennial Drought, a koala study led by researchers at the San Diego Zoo found a decline in population numbers. Severe drought and wildfire no doubt contributed to that downturn.

What is rarely acknowledged, however, is that the [koala is an irruptive species](#). Its populations expand rapidly when young, nutrient-rich foliage becomes available – particularly after thinning, disturbance, or fire. The flush of saplings and regrowth that follows fire can produce precisely the conditions under which koala numbers surge. In other words, the same disturbance processes that are portrayed as threats are often the ecological drivers of recovery and expansion.

By presenting short-term declines as evidence of systemic failure, activists ignore the longer population cycles characteristic of disturbance-adapted species. The koala becomes a symbol, not of ecological complexity, but of selective storytelling.

As this political shift gained momentum, an academic counter-current also surfaced. From the early 1990s, several papers began questioning the historical foundations established by Eric Rolls and later supported by researchers such as Mark Allen. In 1991, a paper by E.H. Norris, Peter Mitchell and Diane Hart, published in *Vegetatio*, challenged the scale, timing and causes of the pine regeneration described by Rolls, even though the authors called their work preliminary and cautioned against broad generalisations. It has since been widely cited by preservation advocates as proof that dense pine forest had always dominated the Pilliga.

However, that claim does not stand up to close scrutiny. The authors did not recreate pre-settlement conditions in the Pilliga itself. Instead, they extrapolated from explorer descriptions of pine scrub along the Lachlan and Murrumbidgee River systems – landscapes with completely different soils, hydrology and disturbance histories. Oxley, Sturt and Mitchell did indeed describe dense pine along those river corridors. That evidence was then used to imply that dense pine must have been the regional norm across the Pilliga sandplain. However, the reasoning is flawed because pine behaviour in riverine environments provides little insight into what happened on the deep sands of the Pilliga, where the documentary and structural record points in a very different direction.

Rolls himself never denied that dense pine existed in other areas early on. He references Oxley's 1817 observations of "very thick cypress scrub" near

present-day Weethalle, west of West Wyalong. His argument was not about continental uniformity. It was the Pilliga sand country that experienced a specific post-European transformation.



*Sleeper cutters' camp in Pilliga Forest.
SLNSW_FL1689623.*

That case rested on evidence drawn from the Pilliga itself, such as explorer journals describing open country where riders could move freely; stocking records showing tens of thousands of sheep, cattle and horses on land now almost impenetrable with pine; early forestry inventories recording one or two mature trees per acre in the late nineteenth century; and regeneration pulses that matched the collapse of Aboriginal fire regimes, the spread of rabbits, drought cycles, rainfall patterns and the suppression of mild burning.

A second challenge arose in 1997 with a paper by botanists John Benson and Peter Redpath. Their critique targeted not only Rolls but also a wider range of writings that depicted pre-European Australia as mainly open woodland shaped by regular Aboriginal fire. Their approach was cautious. They emphasised environmental variability and warned against making broad generalisations across a continent with highly diverse soils, climates and landforms. They re-examined explorer journals, including Oxley's, and suggested that some references to smoke and fire might have been misunderstood. They also proposed that original woodlands may have been denser than Rolls suggested.

As a general warning against oversimplifying national history, this caution is reasonable. But when applied specifically to the Pilliga, it does not negate the main evidence. Benson and Redpath did not provide direct evidence that most of the Pilliga sandplain was once covered by dense pine forest. Their alternative density estimates were also based on other woodland systems. Their reinterpretation of explorer accounts introduced uncertainty, but uncertainty is not evidence of a pre-existing closed forest.

More importantly, both Norris *et al* and Benson and Redpath's papers do not address the most telling local evidence of nineteenth century stocking figures, early forestry stem counts, the dominance of even-aged pine cohorts dating back to the late nineteenth century, the 1880 parliamentary records describing new pine growth on land disturbed by European stock, Allen's ecological mechanism linking grazing and fire exclusion to mass pine recruitment, the multi-decade regeneration pause caused by rabbits and the second regeneration surge following myxomatosis. These data come not from impressionistic travel writing but from the forest itself and from administrative records. None of this is refuted.

Benson and Redpath's treatment of Aboriginal fire is also inconclusive. While they argue against uniform burning, they do not propose an alternative fire-regime model that can explain the sudden and large-scale structural change of the Pilliga following settlement. In contrast, the combined effects of disrupted Indigenous burning, grazing, rabbits and fire exclusion align with the timing and pattern of change quite precisely.

Benson and Redpath correctly remind us that landscapes are never uniform. Their work does not disprove that the Pilliga Scrub, as it now exists, is essentially a post-European artefact. Yet their cautionary tone has since been selectively repackaged to support the modern "remnant forest" narrative. However, when the forest itself is considered as evidence, a completely different picture emerges.

In activist hands, that modest academic caution has been transformed into a political tool. The Pilliga is now almost automatically described as a "remnant forest", a biological survivor that somehow escaped history unscathed, rather than as a forest that expanded across the plains after European land use began. This rhetorical shift is central to its rebranding as a wilderness icon that must be permanently excluded from management.

Nevertheless, Rolls' phrase remains true. The Pilliga was not an ancient forest patiently awaiting rescue. It was a forest that "grew up and drove men out". It emerged from disruption, thrived under changed fire regimes, grazing and pests, and was later stabilised through forestry. The papers of Norris and colleagues, and of Benson and Redpath, have not altered that history. What they do not support is the modern myth of the Pilliga as a timeless remnant of primeval Australia. They simply remind us that nature resists tidy ideological labels.

Fire: from tool to terror

Fire has always been part of the Pilliga. In a land shaped by drought, lightning and wind, no forest exists without it. What has changed is not the presence of fire but how it now behaves. Its size, speed and intensity are no longer what they once were. That change did not arrive solely because of the climate. It also coincided with the slow retreat of active forest management after reservation, followed by a long period of quiet neglect.

One important but often overlooked factor helps explain the nature of fires before the 1950s. Photos of the Pilliga

from the late 1930s show woodlands with clear, open floors – a situation caused by rabbits. Before myxomatosis was introduced, rabbits ate almost all understorey regrowth. Foresters at the time also kept the ground neat, slashing, pulling and tidying as part of their routine work. The combined effect was an artificially low-fuel environment. Under these conditions, fires in the pre-war and immediate post-war years tended to be mild, easy to control and behaved in predictable ways.



Clean forest understorey, Pilliga National Forest, 1939.
SLNSW_FL1889571.

That illusion of stability vanished almost overnight. When myxomatosis was released in 1950, rabbits died out at an astonishing pace. Within a single season, the forest floor burst into cypress regeneration – millions of seedlings sprouted into a continuous layer of flammable material, helped by the record rains in 1950, which caused heavy fuel growth across valleys and flats.

Foresters noticed it immediately but lacked any precedent for dealing with a fuel pulse of such intensity. Eighteen months later, in the summer of 1951, the Pilliga experienced its largest fire on record. The 350,000 hectare conflagration that burned for two weeks was not due to poor management but was the predictable outcome of a sudden biological release and an unprecedented fuel load. This event marked a turning point that forced foresters to implement systematic fuel reduction and thinning programs throughout the 1950s and 1960s – practices that were later abandoned under reservation.

In contrast, the fire of December 1982 burned under very different conditions. Sparked by lightning on 3 December during a widespread drought, it was detected on the 5th and exploded in intensity by the 8th. On 6 December alone, it travelled around 35 kilometres eastward and burned more than 62,000 hectares in a single day. By the time it was brought under control on the 10th, about 110,000 hectares had been burnt. Temperatures reached 37 degrees Celsius, relative humidity dropped to 24 per cent, and strong north-north-west winds gusted to 36 kilometres per hour – conditions that guaranteed extreme fire behaviour.

Yet even then, remnants of the old management system still mattered. On the southern edge of the burn, the fire was contained where a fuel-reduction burn had been carried out two years earlier along Delwood Road. That prescribed burn, a practice introduced after the 1951 disaster, proved decisive. The fire still burned fiercely, but it stopped where fuels had been altered. It is a detail easily overlooked today, but it speaks volumes about what deliberate preparation once achieved.

By 1997, the Pilliga had reached a tipping point. The Timmallallee Creek fire, sparked by lightning on 28 November during extremely dry conditions, behaved differently than earlier fires. It regularly broke through control lines, spread across large areas in multiple directions, and directly threatened homes, farms and infrastructure. Several houses and outbuildings were lost across the Shire. Smoke hovered over Narrabri as 143,000 hectares burned.

What set 1997 apart was not just the weather but also the continuity of fuels across the forest. Regrowth had locked up vast areas that were once thinned, grazed and broken by access. Fire controllers eventually adopted a new strategy to replace the unsuccessful options. The so-called "Blue Line" – an emergency containment line outside the eastern edge of the forest in open grassland, where the fire could finally be stopped because the fuels changed. It was an acknowledgment, written onto the ground itself, that the interior of the modern Pilliga had become effectively unfightable under extreme conditions.

After Carr's massive reservation lock-up, Nationals MLC Jenny Gardiner moved a prescient motion in the State Legislative Council on 30 November 2005, citing:

Hundreds and thousands of hectares of woodlands, which are quite capable of handling fairly infrequent logging, will now be locked up to await the inevitable and frightening firestorms, which will do far, far more damage in a few hours than a century of sawmilling.

By 2006, the warning signs were impossible to ignore. Fires scorched more than 120,000 hectares, including large parts of the newly declared Tinkramanah National Park and about half of the remaining timber production forest. Local towns were once again at risk. Anger grew and many locals insisted that the severity of the fires was no accident – that it stemmed directly from converting a working forest into a national park. In a young, regeneration-focused system like the Pilliga, they argued, forestry wasn't the enemy of biodiversity but one of its regulators.

The official response from National Parks was defensive. The agency claimed that it had continued fire management under the previous Forestry regime. It pointed out that major fires had occurred roughly every decade, regardless of land ownership or hazard reduction efforts. While that may be statistically true, frequency was never the main issue. The real concerns were intensity, scale and how controllable the fires were. Replacing open woodland and lightly thinned forest with dense, locked regrowth in a hot and windy environment does not just preserve a fire regime – it fundamentally alters it. This creates the conditions for megafires. To deny that is to misunderstand how fire actually works.



Duck Creek fire.

The Duck Creek fire of December 2023 marked the culmination of a long trajectory. After extended drought, high temperatures and persistent winds, lightning started several fires across the Pilliga. The Duck Creek fire moved rapidly through dry, continuous fuels, spreading in multiple directions and crossing over state forest, national park and freehold land alike. Firefighting crews were brought in from all over New South Wales, but containment remained extremely challenging. Evacuations were initiated, and emergency shelters were opened. Smoke and ash travelled far beyond the fire area. By the time the fire was finally contained over the New Year, approximately 130,000 hectares had burned, including more than 79,000 hectares of state forest after the canopy fire broke out of the national park.

This fire did not happen because the forest lacked legal protection. It happened because it had been stripped of ecological preparation. Thinning, fuel management and structured grazing had created a mosaic of defendable country. Their removal, combined with long-term fire exclusion, turned large parts of the forest into a continuous bed of flammable regrowth. What followed was not just another fire, but a fire of a new kind – the sort now called, without exaggeration, a megafire.



Fire has always been an integral part of the Pilliga landscape. What counts is how the forest is prepared for it. When management is pulled back and fuels are allowed to build unchecked, fire stops being an occasional tool and becomes a source of fear. The modern Pilliga makes that clear.

Most of the severe impacts have taken place in the East Pilliga and the eastern part of the Central Pilliga, including the Pilliga Nature Reserve. In contrast, large sections of the West Pilliga and the western Central Pilliga have remained unburned for over 50 years due to active forestry management.

The sad reality is that the Pilliga will burn again, and again. Not because it is old, but because we keep pretending it is.

The problem of time and the war on Eric Rolls

Historian Tom Griffiths has long argued that Australians find it hard to read time in their landscapes. We compress centuries into moments, and moments into myths. We favour moral clarity over ecological truth.

The Pilliga shows that failure can be precise and merciless. What seems eternal is actually young, what appears natural often depends on circumstances and what looks preserved is often just unmanaged.

Poet Les Murray understood this unease instinctively. His Pilliga is not a cathedral of deep time but a place of uneasy invention. He read and re-read *A Million Wild Acres* soon after it was published and wrote about a forest that feels older than it is, heavier than its years:

With all the delight of one who knows he has at last got hold of a book that is in no way alien to him.

Griffiths strongly believes Rolls has written the best environmental history of Australia and wanted to give the book to any visitor or local to help them understand our country.

Eric Rolls paid a heavy price for sharing this story. Environmental critics accused him of exaggerating his claims, misinterpreting the evidence and absolving Europeans of blame. Yet the real attack was ideological. Rolls challenged the dogma that Europeans arrived, forests disappeared and salvation only comes through exclusion.

Norris *et al's* 1991 paper became one of the most cited attempts to dismantle Rolls' thesis. Yet, its method revealed its fragility. They extrapolated descriptions of pine scrub along the Lachlan and Murrumbidgee Rivers, regions known to have developed dense pine well before the Pilliga. They used these as proxy evidence that the Pilliga itself must have always been dense.

This was a historical substitution, as it bypassed Oxley, stocking returns, forest inventories, settler testimony and Allen's landscape archaeology.

And yet, in modern academic discourse, Norris *et al's* is politely cited, while Rolls is quietly regarded as an inconvenient eccentric.

The danger of the remnant forest myth

The gravest threat to the Pilliga isn't the chainsaw. It's the belief that the forest must be old to warrant protection.

That belief causes paralysis, because it results in the refusal to thin and the rejection of prescribed burning. This leads to megafires and the quiet destruction of the very values activists claim to defend. Veteran birdwatcher David Johnston also emphasised this point. Johnston has lived beside the Pilliga all his life. His main focus was promoting the Pilliga as a bird sanctuary:

If we close off the Pilliga it'll just go back to dense pine scrub.

He believed the only future for the Pilliga was as a managed forest. Its well-being depended on better forestry practices, which he already saw emerging.

The Pilliga shouldn't be worshipped, it should be understood. It needs to be recognised for what it genuinely is – a young forest, created by European disturbance, shaped by them and still needing people.

Eric Rolls' phrase remains the most honest summary of the Pilliga ever written. This was not a forest that was destroyed. It was a forest that spread across paddocks, erased fences, collapsed carrying capacity and forced graziers out.

The tragedy now is that, having observed that transformation throughout recorded history, we refuse to acknowledge it. We rebrand a disturbed artefact as a pristine wilderness. We elevate a legacy of management into an eternal myth because it aligns with the beliefs of those eager to idolise a false wilderness.

ROBERT ONFRAY'S BLOGS, BOOKS AND OTHER WRITING

Robert Onfray writes monthly updates on a variety of topics each month, including forestry, Fraser Island, the Fraser Coast, and on travelling around Australia. They are published on his website www.robertonfray.com which also includes details of how to subscribe to his e-mail list. His Facebook page is at www.facebook.com/robertonfraywriter.

Forestry, forests and timber-related articles published since our April issue are listed below.

- May:** [A forest that grew because people came](#)
- June:** [The swift parrot and the convenient scapegoat](#)
- July:** [Living with fire in the Adelaide Hills](#)
- August:** [How the mallee became South Australia's breadbasket](#)
[A forgotten family behind Fraser Island's first forestry experiment](#)

Robert's 2021 book, *Fires, Farms and Forests: A Human History of Surrey Hills, north-west Tasmania*, can be ordered from his website for a cost of \$55 plus postage.

His latest book, *Paradise Preserved: A History of Forestry on Fraser Island*, was published in late 2025 and is available from Connor Court Publishing. A review of the book, including details of how to order, was included in the December 2025 issue of the newsletter (p17).

Robert's articles are also published by *Australian Rural & Regional News* arr.news. He also helps manage the AFHS website.



TPNG FORESTRY – JULY REUNION IN SOUTH EAST QUEENSLAND

By Dick McCarthy, Editor PNGAF Magazine

After a period of some fifty years, former foresters of the Territory of Papua and New Guinea (TPNG) met in South East Queensland between 9 and 16 July 2026.

Dick McCarthy, editor of the Papua New Guinea Australian Foresters (PNGAF) magazine series - *Australian foresters in Papua and New Guinea from 1922 to 1975*, travelled to Queensland to acknowledge the efforts by many of the TPNG foresters who provided invaluable assistance over the last decade in documenting those forest scientists' efforts.

The PNGAF project (in serialised magazine format posted on the site <https://issuu.com/rbmccarthy>) covers the history of Australian foresters in PNG from 1922 to 1975. It attempts to explain the strange coming together of methods, opportunities, and motives of early Australian foresters to enact lasting social changes within the PNG forest sector. At the same time, it provides an insight into the introduction of sustainable forest management practices and tree growing into the privately owned forest lands of PNG. Many people and organisations have contributed and continue to contribute to this social forest history project, especially because its format is non-commercial and for educational purposes.

The main gathering was held at the beautiful Mary Cairncross Scenic Reserve – Mountain View Restaurant Maleny on Monday 13 July 2026. It was a fitting venue for a group whose professional lives had revolved around scientific forest management of PNG's forests.

The reunion was made possible through the efforts of Des and June Harries assisted by Barry Gray. Their hospitality and organisation were greatly appreciated. For some it had been over fifty years since they last met.

Although the years have passed quickly, conversation certainly hadn't. Within minutes, the group were recalling their days in the PNG Forest Service, the people they worked alongside, the challenges faced and the friendships that developed while working in one of the world's most remarkable and relatively unexplored forest environments.

During the visit, they presented Dick McCarthy with a copy of *The Magic of Mary Cairncross Scenic Reserve*, accompanied by a thoughtful inscription acknowledging his work in recording the history of forestry in PNG. It was an unexpected and much-valued gesture that he will forever honour.

By 1975, Australian foresters had undertaken initiatives for the development of detailed flora mapping inventories of the various forest systems of PNG; community-based forest management interventions, including a forest concession system catering for all parties, i.e. landowners, government agencies and developers; industrial wood processes for the conversion and treatment of PNG woods, coupled with development of a structured wood processing and construction industry; silvicultural techniques and establishment of PNG species in plantation format;

forestry technical and tertiary training institutions and the involvement of the PNG people in their forests economic development.

This ongoing PNGAF social history project would not be possible without the ongoing support and input of PNG historians and especially senior Queensland forest scientists.

The implications for Australia and PNG of political, economic and security development in terms of PNG forestry is that there is a long standing and significant wood trade between Australia and PNG especially Queensland, encompassed within a sphere of similar forest types, similar plantation species and forest products bound by many existing long-term areas of mutual co-operation (e.g. forestry training) within the respective government and private sectors.

During the period up to 1975, there was a need for PNG as an emerging nation to develop its forest sector to assist in creating its own economy utilising its resources (including wood fibre) but at the same time ensuring people's interests were protected. This PNGAF project is to ensure that this forestry knowledge and the lessons of the past help current and future forest sector personnel to develop their own perspective re developing PNG's forest sector.

The early Australian foresters in PNG loved forestry and PNG. Against all odds, these early Australian foresters in PNG demonstrated the ability to not only create a forest sector but the ability to influence landscapes and environment in building the PNG nation.

TPNG Forest Personnel

Phil Ainsworth	Chief, Division of Mapping, Department of Forests, economist central planning
Barry Gray	Forest entomologist/OIC Forest Research, Bulolo
Des Harries	TPNG Forest cadet, silviculturist, wood scientist FPRC, Hohola
Di Howcroft	Botanical illustrator
Mike Jones	Mapping Officer
Dick McCarthy	TPNG Forest cadet, District Forester, Bulolo Wau
Paul Ryan	TPNG Forest cadet, District Forester, Madang region
Ross Wylie	Forest entomologist

Project Supporters

Gary Bacon	Former Head of Queensland Forestry
Keith Gould	Senior Officer Queensland Forestry
Andy Page	Forester- specialist tropical forest harvesting systems, LCOP application
Michael Pearson	Educationist, PNG Historian
Andrea Williams	President PNGAA, editor PNG Kundu

Editor's note: A short article on forestry in the Territory of Papua was published in the December 2021 issue of the newsletter – see www.foresthistory.org.au/wp-content/uploads/2022/01/afhsnewsletter84.pdf (pp22-23).



*L-R. Dick McCarthy, Phil Ainsworth, Trish Wylie, Ross Wylie, Mike Jones, Ellen Jones, Paul Ryan, Jeanie Gray, Barry Gray, Di Howcroft, Des Harries, June Harries.
 Photo by Andrea Williams. Apologies Jim Belford (flu).*



L-R. Phil Ainsworth, Andrea Williams, Trish Wylie, Ross Wylie, Mike Jones, Ellen Jones, Paul Ryan, Jeannie Gray, Di Howcroft and Barry Gray. Photo by Des Harries.



L-R Barry Gray, Phil Ainsworth, Mike Jones, Dick McCarthy, Des Harries, and Paul Ryan. Photo by Andrea Williams.



L-R Carol Bacon, Dick McCarthy, Gary Bacon (formerly head Qld Forestry), Andy Page. Photo by Andy Page.



Left: Michael Pearson PNG historian and last expat in PNG Education Department, with Dick McCarthy.
Right: Keith Gould (Senior Forester Qld. Forestry) and wife Trish.

FOREST YARNS – ABORIGINAL CONNECTIONS

By Tony Ford

Tony Ford is a local historian in the Rushworth area of north-central Victoria and writes a column for the local paper, the "Waranga News" www.wnews.org.au, which comes out fortnightly. He is writing a series of stories called "Forest Yarns"; over 30 have been published so far and has continued into 2026. When the series has finished, he will collate all the stories, do an index etc, and put them on local websites. The articles are available at www.wnews.org.au/author/tony. Tony is a member of the Australian Forest History Society.

"Aboriginal Connections" was published in the "Waranga News" on 26 September 2024 www.wnews.org.au/forest-yarns/2024/forest-yarns-no-2.

The first users of the Rushworth Forest were the Aboriginal people who had been there for tens of thousands of years before European colonisation began to encroach on their country from the 1830s.

Many stories about these people were included in an earlier series which appeared in the *Waranga News* over four years ("Waranga Dreaming" 2019-22).¹ Consequently, this current series of stories will not repeat the content of those stories, but will simply recap some of the main themes that were contained in that collection.

The people who traversed the country on foot and used the forests around Rushworth and Murchison before colonisation were the Ngurai-illum Wurrung people, who were part of what is now usually known as the Kulin Nation – a loose confederation of Aboriginal people who comprised several similar language groups, which had family connections and shared many cultural attributes.

Connection to country

It is hard for most of us to imagine the depth of connection between Aboriginal people and their Country. The connection was a practical one, because Country provided everything that the people needed to live their lives in a sustainable way. However, it was also a spiritual one, with many significant places throughout the local area that will largely remain a mystery to us. They could include places we now know by other names – the waterhole at Whroo, Balaclava Hill, the Mount Camel range, numerous wetlands including Reedy Lake and the former Waranga swamp.

There are magical places of significance in and around the Rushworth Forest that are an innate part of the former occupants and their descendants, and always will be. Travelling along songlines, they returned to them again and again throughout their lives, collecting ever-evolving stories that would be passed down orally over multiple generations. Sometimes this would be through narration of particular stories, while at other times it would be encapsulated in song, dance, ceremony and artwork.

Connection of people and Country remains strong, even though the descendants are now largely physically removed. For an Aboriginal person, it could be stated

that they considered themselves part of their environment. In the context of these stories, they were "of the forest", which would incorporate all the fauna, flora, geology and other aspects of the forest.

Products of the forest

In terms of the products that the Ngurai-illum Wurrung people obtained from the forest, water was obviously vitally important, as the forest is often extremely dry. One historian was convinced that the rock well at Whroo was part of a number of reliable water sources along the songlines between Reedy Lake and points to the north and west, some of which were mentioned above.²

Materials to make items essential to the daily lives of the Aboriginal people were collected in the forest – timber for weapons and tools, gum from the wattle and grass trees as adhesives, plants for making a range of other items such as fish traps and dilly bags, bark for building materials and making twine, stone and ochre, and medicinal plants amongst many others.

Food was also collected from the forest, including birds, animals and reptiles. With hollows in older trees providing homes for smaller animals like possums, the forest would be a rich food source, although hunting for kangaroo, a staple food, more often occurred on the plains to the north of the forest. By-products from these animals included skins, bones, teeth and sinews.

Many plant materials were also sourced for food, including the fruit of the cherry ballart, as well as various roots and leaves. Bush honey was reputed to have been much sought after.

One of the things that is clear from the Aboriginal way of life in the forest is that when something was taken, the harvester only took what was needed at the time. This meant that later sojourners were provided for.

With whatever was taken, very little or nothing was wasted. All parts of the animal or plant were used where possible. If a plant or animal happened to be a totem of a forager, then that species would not be touched by that person, and they would have a duty to ensure its welfare and conservation.

References

1. Tony Ford, 2022. *Waranga Dreaming – Stories of the Ngurai-illum Wurrung People and Their Country*. https://rushworthit.com.au/Rushworth_Museum/WARANGA%20DREAMING%20-%20ALL%20STORIES.pdf
2. Harry Parris (of Nagambie).

EUCALYPTS OF THE BIBBULMUN TRACK, WESTERN AUSTRALIA – PART 3

By Fintán Ó Laighin

Author's note: Part 1 of this article was published in the December 2025 issue of newsletter (pp6-9) and discussed eight of the 14 species of eucalypt native to Western Australia's Bibbulmun Track, all of which were first described in the 1800s. Part 2, published in April 2026 (pp19-20), discussed four of the remaining six local species, all described between 1904 and 1934, along with some subspecies described in 1991. Part 3 covers the remaining two species native to Western Australia, as well as the three species from south-eastern Australia which are grown in plantations along the track.

As with Parts 1 and 2, I would like to acknowledge the anonymous authors of the many Wikipedia pages from which I've drawn both ideas and, in some cases, text. Links are provided to all pages. Also acknowledged are the many archives that have digitised and posted online the journals and publications in which the original taxonomic descriptions and revisions appeared.

1969 Darling Range ghost gum or Butter gum (*Eucalyptus laeliae*)

Found in Bibbulmun Track guidebook section 1

*Eucalyptus laeliae*¹ was first described in 1968 by Francis Podger² and George Chippendale³ in the *Journal of the Royal Society of Western Australia*⁴ from a type specimen collected by Leslie McGann⁵ near North Dandalup in October 1966. Podger and Chippendale were botanists from the Forest Research Institute, part of the Australian Government's Forestry and Timber Bureau, based respectively in Perth and Canberra. McGann was also based in Perth. *E. laeliae* is closely related to the Powderbark Wandoo (*E. accedens*)⁶ which is another species found along the Bibbulmun Track (see Part 2, p19), and is a species with which Podger and Chippendale say *E. laeliae* was "previously confused".

The species name "laeliae" refers to Laelia, one of the priestesses of Vesta (i.e. the vestal virgins) of ancient Rome,⁷ and refers to the smooth, column-like trunk or, as Podger and Chippendale describe it, "the white clothing of the tree".

1974 Rate's tingle (*Eucalyptus brevistylis*)

Found in Bibbulmun Track guidebook section 7

*Eucalyptus brevistylis*⁸ was first described in 1974 by Ian Brooker^{9,10} in *Nuytsia: Journal of the Western Australian Herbarium*.¹¹ Brooker was then with the Forestry and Timber Bureau in Canberra. The type specimen was collected near Walpole in 1971 by Bruce Maslin.¹² The common name commemorates John (Jack) Rate, a forester who, in the late 1960s, "noticed what he believed to be a different tingle species from the two already known and described – Yellow tingle (*E. guilfoylei*) and Red tingle (*E. jacksonii*)" (see Part 2, pp19-20). He collected botanical specimens from this other tree to aid in identification using a homemade slingshot to shoot down fresh leaves, fruits and buds.¹³ Sadly, Jack was killed by a falling limb in 1969 before his discovery was officially recognised.

Despite suggestions that the species be named in honour of Jack, Brooker chose to name it after a botanical feature of the tree – "brevistylis", a name derived from Latin "brevis" meaning "short" and "stylis" referring to the short style in this species. Robert Onfray calls this "a kick in the guts to Jack and the forestry profession where a diligent forester went to all that trouble to identify a new species and was proven correct. As a consolation, Roger Underwood suggested that the common name be Rate's tingle, which stuck."

Despite not recognising Rate in the formal name of the species, Brooker did however state that "A tribute must be made to the late Forester J. Rate through whose collections and persistent efforts from the early 1950's these trees have been recognised as a distinct species."¹⁴

The John Rate Lookout along the Bibbulmun Track between Walpole and Mount Clare Campsite is named in Jack's honour; a Bibbulmun Track sign for a 10km walk between the lookout and Walpole advises that "The walk commemorates well-known local forester, John Rate, who contributed much to our understanding of forests around Walpole." The lookout is easily accessible from the South Western Highway.

¹ *Eucalyptus laeliae*. https://en.wikipedia.org/wiki/Eucalyptus_laeliae

² Rosanne Walker and Peter Fagg, 2001 (modified 2024). "Podger, Francis Denis (1933-1999)", *Encyclopedia of Australian Science and Innovation*. www.eoas.info/biogs/P003864b.htm

³ George Chippendale. https://en.wikipedia.org/wiki/George_Chippendale

⁴ F.D. Podger and G.M. Chippendale, 1968. "A new species of Eucalyptus from Western Australia", *Journal of the Royal Society of Western Australia*, Vol. 51(3), pp65-67. www.biodiversitylibrary.org/item/173671#page/3

⁵ Council of Heads of Australasian Herbaria, 2007 (update). "McGann, Leslie Roy (1935-)", *Australian Plant Collectors and Illustrators 1700s-2000*. Australian National Herbarium. www.anbg.gov.au/biography/mcgann-leslie-roy.html

⁶ *Eucalyptus accedens*. https://en.wikipedia.org/wiki/Eucalyptus_accedens

⁷ Vestal Virgin. https://en.wikipedia.org/wiki/Vestal_Virgin (Laelia also gives her name to a genus of orchid found in Mexico, Central America and South America – see <https://en.wikipedia.org/wiki/Laelia>.)

⁸ *Eucalyptus brevistylis*.

https://en.wikipedia.org/wiki/Eucalyptus_brevistylis

⁹ Ian Brooker. https://en.wikipedia.org/wiki/Ian_Brooker

¹⁰ Council of Heads of Australasian Herbaria, 2025 (update). "Brooker, Murray Ian Hill (1934-2016)". *Australian Plant Collectors and Illustrators 1700s-2000*. Australian National Herbarium. www.anbg.gov.au/biography/brooker-ian.html

¹¹ M.I.H. Brooker 1974. "Six new species of Eucalyptus from Western Australia", *Nuytsia: Journal of the Western Australian Herbarium*, Vol. 1 Issue 4, pp297-314 (the description of *E. brevistylis* is on pp310-313). <https://florabase.dbca.wa.gov.au/nuytsia/issues/4>

¹² *Eucalyptus brevistylis*. https://en.wikipedia.org/wiki/Eucalyptus_brevistylis

¹³ Robert Onfray, 2022. "Who was Jack Rate?" www.robertonfray.com/2022/04/29/who-was-jack-rate

¹⁴ M.I.H. Brooker 1974. "Six new species of Eucalyptus from Western Australia", *Nuytsia: Journal of the Western Australian Herbarium*, Vol. 1 Issue 4, p313. <https://florabase.dbca.wa.gov.au/nuytsia/issues/4>



The final section of this series discusses the three eucalypts from south-eastern Australia which are grown in plantations along the Bibbulmun Track – *E. saligna* (named in 1797) and *E. globulus* (1800), both of which are species of blue gum, and *E. muelleriana* (1890), a species of stringybark. *E. saligna* and *E. muelleriana* have been grown in Western Australia since at least the 1930s – a 1938 publication says that experimental plots of five eucalypt species, including these two, "have shown extremely rapid and healthy development in contrast to the indifferent growth of pines on adjoining plots".^{15,16}

E. globulus has been grown in Western Australia since at least the early to mid 1990s, driven by the expansion of plantation forestry managed investment schemes "with a focus on short rotation eucalypt species with forest management regimes suitable for the production of woodchips for the Asian pulp and paper market".^{17,18} Sadly, many of the companies promoting these schemes had collapsed by the early 2010s – e.g. Timbercorp, Great Southern Plantations, Willmott Forests and Gunns Plantations¹⁹ – bringing many investors along with them. Some of the eucalypt plantations along the Bibbulmun Track now look a bit derelict.

¹⁵ S.L. Kessell and T.N. Stoaite, 1938. "Pine Nutrition. An Account of Investigations and Experiments in Connection with the Growth of Exotic Conifers in Western Australian Plantations." *Forests Department Bulletin* No. 50, Perth, p12.

<https://library.dbca.wa.gov.au/Journals/080033/080033-50.pdf>

¹⁶ The history of softwood plantations in Western Australia is the subject of a paper delivered at the 6th National Conference of the Australian Forest History Society, held in Augusta WA in Sep 2004 – see Peter N. Hewett & John B. Sclater, 2005. "The development of pine logging in Western Australia", www.foresthistory.org.au/Proceedings2004/138.pdf and www.foresthistory.org.au/conference-2004.

¹⁷ Australian Government Department of Agriculture, 2014. *Submission to the Senate inquiry into the structure and development of forestry managed investment schemes*. Submission no. 135, available from www.aph.gov.au/Parliamentary_Business/Committees/Senate/Economics/MIS/Submissions

¹⁸ The Senate Economics References Committee, 2016. *Agribusiness Managed Investment Schemes. Bitter Harvest*. Parliament of Australia. www.aph.gov.au/Parliamentary_Business/Committees/Senate/Economics/MIS (Note: When it was established in June 2014, the inquiry was focussed solely on forestry managed investment schemes but was expanded to encompass agribusiness as "Many of the people who made submissions to the inquiry had invested in agribusiness managed investment schemes that included both forestry and horticultural schemes" (final report, p.xix).)

¹⁹ The Senate Economics References Committee, 2016. *Agribusiness Managed Investment Schemes. Bitter Harvest*. Parliament of Australia, p.xvii. www.aph.gov.au/Parliamentary_Business/Committees/Senate/Economics/MIS

1797 Sydney blue gum (*Eucalyptus saligna*)

Found in Bibbulmun Track guidebook section 2

Eucalyptus saligna,²⁰ commonly known as the Sydney blue gum, was formally described in October 1796 by English naturalist James Edward Smith²¹ in a presentation to the Linnean Society of London and published in the *Transactions of the Linnean Society* in 1797.²² Smith does not say why he named the species "saligna" although it is suggested that it refers to some unexplained similarity to a willow (*Salix*).²³ EUCLID says that it comes from the Latin "salignus" meaning "willow-like" but calls it an "allusion obscure".²⁴ Its closest relatives are the Mountain blue gum (*E. deanei*) and Flooded gum (*E. grandis*).

There have been a number of varieties and subspecies proposed over the years, all of which are regarded as taxonomic synonyms of either *E. saligna*, *E. deanei*, *E. grandis* or *E. botryoides* (the latter known as Woollybutt or Southern mahogany, among other names):²⁵

- *E. saligna* var. *saligna* (1899, a synonym of *E. saligna*).²⁶
- *E. saligna* var. *parviflora* (1899, a synonym of *E. deanei*).²⁷
- *E. saligna* var. *pallidivalvis* (1902, a synonym of *E. grandis*).²⁸
- *E. saligna* var. *botryoides* (1906, a synonym of *E. botryoides*).²⁹
- *E. saligna* var. *protrusa* (1934, a synonym of *E. saligna*).³⁰

²⁰ *Eucalyptus saligna*. https://en.wikipedia.org/wiki/Eucalyptus_saligna

²¹ James Edward Smith (botanist). [https://en.wikipedia.org/wiki/James_Edward_Smith_\(botanist\)](https://en.wikipedia.org/wiki/James_Edward_Smith_(botanist))

²² James Edward Smith, 1797. "Botanical Characters of Some Plants of the Natural Order of Myrti." *Transactions of the Linnean Society*, Vol. III, London, pp255-288. (The description of *E. saligna* is on p285.) www.biodiversitylibrary.org/item/46221

²³ Douglas J. Boland, M.I.H. Brooker, G.M. Chippendale, Maurice William McDonald, 2006. *Forest Trees of Australia*, CSIRO Publishing, Collingwood, VIC, p84.

²⁴ *Eucalyptus saligna*. EUCLID Eucalypts of Australia. https://apps.lucidcentral.org/euclyd/text/entities/eucalyptus_saligna.htm and A.V. Slee, M.I.H. Brooker, S.M. Duffy, J.G. West, nd. "Eucalyptus saligna", in P.G. Kodala (ed.), *Flora of Australia*. Australian Biological Resources Study, Australian Government Department of Climate Change, Energy, the Environment and Water, Canberra.

<https://profiles.ala.org.au/opus/foa/profile/Eucalyptus%20saligna>

²⁵ *Eucalyptus botryoides*. https://en.wikipedia.org/wiki/Eucalyptus_botryoides

²⁶ *Eucalyptus saligna* Sm. var. *saligna*. E.M.Ross. "Vascular Plants", Australian Plant Name Index. <https://biodiversity.org.au/nsi/services/rest/name/apni/76300/api/a-pni-format>

²⁷ *Eucalyptus saligna* var. *parviflora* H.Deane & Maiden. "Vascular Plants", Australian Plant Name Index. <https://biodiversity.org.au/nsi/services/rest/name/apni/76272/api/a-pni-format>

²⁸ *Eucalyptus saligna* var. *pallidivalvis* R.T.Baker & H.G.Sm.. "Vascular Plants", Australian Plant Name Index. <https://biodiversity.org.au/nsi/services/rest/name/apni/76253/api/a-pni-format>

²⁹ *Eucalyptus saligna* var. *botryoides* (Sm.) Maiden. "Vascular Plants", Australian Plant Name Index. <https://biodiversity.org.au/nsi/services/rest/name/apni/74799/api/a-pni-format>

³⁰ *Eucalyptus saligna* var. *protrusa* Blakely & McKie. "Vascular Plants", Australian Plant Name Index. <https://biodiversity.org.au/nsi/services/rest/name/apni/76288/api/a-pni-format>

- *E. saligna* var. *protusa* (1986, an orthographic variant of *E. saligna* var. *protrusa* which itself is a synonym of *E. saligna*).³¹
- *E. saligna* subsp. *botryoides* (1993, a synonym of *E. botryoides*).³²
- *E. saligna* subsp. *saligna* (1993, a synonym of *E. saligna*).³³

Its natural distribution is within 120km of the coastline from Sydney to Maryborough (QLD). Populations south of Sydney (Port Jackson) previously regarded as *E. saligna* are now considered to be hybrids with *E. botryoides* (commonly known as Bangalay, Bastard jarrah, Woollybutt or Southern mahogany); the hybrids extend as far south as Gippsland in eastern Victoria.^{34,35}

In plantations, while the pulpwood is acceptable, *E. saligna* is used primarily to produce timber.³⁶

1800 Blue gum (*Eucalyptus globulus*)

Found in Bibbulmun Track guidebook section 5

*Eucalyptus globulus*³⁷ was formally described in 1800 by the French botanist Jacques Labillardière³⁸ in his book, *Relation du Voyage à la Recherche de la Pérouse*.^{39,40} Labillardière collected specimens at Recherche Bay in south-eastern Tasmania during the d'Entrecasteaux expedition in 1792. He named the species after the button-like shape of the capsule. He seemed to be

particularly taken by the tree, describing it as "one of the tallest in nature ... some of half a hectometre" (50m) and noted similarities to *E. resinifera*,⁴¹ a species which had been described by James Edward Smith⁴² in 1790. Labillardière thought that the timber would be "suitable for shipbuilding and could be used for masting, although not as light or as elastic as pine".

In 1883, French botanist Charles Victor Naudin⁴³ identified *E. globulus* var. *pseudo-globulus*, differentiating it from *E. globulus* on the relative smallness of its flowers and fruits;⁴⁴ in 1913, Richard Thomas Baker⁴⁵ proposed *E. globulus* var. *stjohni* as a separate variety.^{46,47} Both of these are now regarded as taxonomic synonyms of *E. globulus* subsp. *pseudoglobulus* (Victorian eurabbie).⁴⁸ The change to Naudin's classification was the result of a 1974 paper by James Barrie Kirkpatrick⁴⁹ published by the *Botanical Journal of the Linnean Society*⁵⁰ which proposed that *E. globulus* be split into four subspecies. Baker's 1913 classification was reclassified as a result of the 2006 Australian Plant Census.⁵¹

The three other subspecies identified in Kirkpatrick's paper are:

- Tasmanian blue gum (*E. globulus* subsp. *globulus*) (originally *E. globulus*).^{52,53}

³¹ *Eucalyptus saligna* var. *protusa* E.M.Ross. "Vascular Plants", Australian Plant Name Index.

<https://biodiversity.org.au/nsi/services/rest/name/apni/236191/api/apni-format>

³² *Eucalyptus saligna* subsp. *botryoides* (Sm.) Passioura & J.E.Ash.

"Vascular Plants", Australian Plant Name Index.

<https://biodiversity.org.au/nsi/services/rest/name/apni/119010/api/apni-format>

³³ *Eucalyptus saligna* Sm. subsp. *saligna* (Sm.) Passioura & J.E.Ash.

"Vascular Plants", Australian Plant Name Index.

<https://biodiversity.org.au/nsi/services/rest/name/apni/119009/api/apni-format>

³⁴ *Eucalyptus saligna*. https://en.wikipedia.org/wiki/Eucalyptus_saligna

³⁵ *Eucalyptus saligna* Sm. PlantNET New South Wales Flora Online. Plant Information Network System of The Royal Botanic Gardens and Domain Trust Version 2.0. <https://plantnet.rbgsyd.nsw.gov.au/cgi-bin/NSWfl.pl?page=nswfl&lvl=sp&name=Eucalyptus~saligna>

³⁶ Philippa Noble, September 2000. "Sydney blue gum for farm forestry", *Agriculture Notes*, Department of Primary Industries (VIC), p2. "The pulpwood produced from this species is acceptable but not preferred because of its low pulp yield and low paper tensile strength."

³⁷ *Eucalyptus globulus*.

https://en.wikipedia.org/wiki/Eucalyptus_globulus

³⁸ Jacques Labillardière.

https://en.wikipedia.org/wiki/Jacques_Labillardiere%C3%A8re

³⁹ Jacques Labillardière, 1800. *Relation du Voyage à la Recherche de la Pérouse*, Tome Premier, Chez H.J. Jansen, Paris, pp151-153.

<https://bibdigital.rjb.csic.es/viewer/13335>. The accompanying plate

(illustrated by Pierre-Joseph Redouté

https://en.wikipedia.org/wiki/Pierre-Joseph_Redout%C3%A9) is

published in a separate volume – see

<https://bibdigital.rjb.csic.es/viewer/13338> (plate 13).

⁴⁰ The authorship of Jacques Labillardière's book is attributed to

"Cen. Labillardière", with "Cen." possibly an abbreviation of

"Citoyen", the French word for "Citizen". The title was officially

adopted during the National Assembly's Declaration of the Rights of

Man and of the Citizen on 26 August 1789 and continued to be used

in post-Revolutionary France. See "Citizen Title", *Glossaurus*.

<https://glossaurus.com/en/glossary/french-revolution/citizen-title>

⁴¹ *Eucalyptus resinifera*.

https://en.wikipedia.org/wiki/Eucalyptus_resinifera

⁴² James Edward Smith (botanist).

[https://en.wikipedia.org/wiki/James_Edward_Smith_\(botanist\)](https://en.wikipedia.org/wiki/James_Edward_Smith_(botanist))

⁴³ Charles Victor Naudin.

https://en.wikipedia.org/wiki/Charles_Victor_Naudin

⁴⁴ Charles Naudin, 1883. *Mémoire sur les Eucalyptus Introduits dans la Région Méditerranéenne*, Société Anonyme des Imprimeries Réunies, Paris, p44. <https://gallica.bnf.fr/ark:/12148/bpt6k9757901k>

(Note: The species listing at

<https://biodiversity.org.au/nsi/services/rest/name/apni/231539/api/apni-format> credits Naudin's taxonomic description to a work published in 1891.)

⁴⁵ Richard Thomas Baker.

https://en.wikipedia.org/wiki/Richard_Thomas_Baker

⁴⁶ R.T. Baker, 1913. "On a New Variety of *Eucalyptus globulus* – *E. globulus* var. *St. Johni*", *The Victorian Naturalist*: Vol. XXX, No. 7 (issue 359), pp127-128 (with plate). (Contained in *The Victorian Naturalist*: Vol. XXX, May, 1913, to April, 1914.)

www.biodiversitylibrary.org/item/38532#page/153

⁴⁷ *Eucalyptus globulus* var. *stjohni* R.T.Baker. "Vascular Plants", Australian Plant Name Index.

<https://biodiversity.org.au/nsi/services/rest/name/apni/204032/api/apni-format>

⁴⁸ *Eucalyptus globulus* subsp. *pseudoglobulus*.

https://en.wikipedia.org/wiki/Eucalyptus_globulus_subsp._pseudoglobulus

⁴⁹ Council of Heads of Australasian Herbaria, 2021 (update).

"Kirkpatrick, James Barrie (1946–)". *Australian Plant Collectors and Illustrators 1700s-2000*. Australian National Herbarium.

www.anbg.gov.au/biography/kirkpatrick-james-barrie.html

(James Kirkpatrick died in Oct 2024.)

⁵⁰ J.B. Kirkpatrick, 1974. "The numerical intraspecific taxonomy of *Eucalyptus globulus* Labill. (Myrtaceae)", *Botanical Journal of the Linnean Society*: Vol. 69, Issue 2, pp89-104.

<https://academic.oup.com/botlinnean/article-abstract/69/2/89/2725893>

⁵¹ Council of Heads of Australasian Herbaria, 2006. *Australian Plant Census*. <https://biodiversity.org.au/nsi/services/search/taxonomy>

⁵² *Eucalyptus globulus* subsp. *globulus*.

https://en.wikipedia.org/wiki/Eucalyptus_globulus_subsp._globulus

- Victorian blue gum (*E. globulus* subsp. *bicostata*) (originally *E. bicostata*).^{54,55}
- Maiden's gum (*E. globulus* subsp. *maidenii*) (originally *E. maidenii*, named after botanist Joseph Maiden.^{56,57,58}

Other names which no longer current are:

- *E. globulus* var. *compacta* (1914, described by the Council of Heads of Australasian Herbaria as "A name of uncertain application").⁵⁹
- *E. globulus* var. *bicostata* (1931, a synonym of *E. globulus* subsp. *bicostata*).⁶⁰

The natural distribution of *E. globulus* ranges from Tasmania to Victoria to southern NSW, with even an isolated population on Mount Bryan (north of Burra) in South Australia.⁶¹

- *E. globulus* subsp. *globulus* is found in Tasmania, including King Island and islands of the Furneaux group and Rodondo Island, and coastal and subcoastal distribution on the southernmost extremities in Victoria.⁶²
- *E. globulus* subsp. *bicostata* occurs in eastern NSW occurring as far north as the Carrai Plateau (about 350km north of Sydney), in Victoria mostly on the slopes of the Great Dividing Range from Orbost in the east west to the Pyrenees, and with a single very old population in South Australia on Mount Bryan.⁶³

- *E. globulus* subsp. *maidenii* occurs in subcoastal ranges of far south-eastern New South Wales and far eastern Victoria.⁶⁴
- *E. globulus* subsp. *pseudoglobulus* is found mainly in Victoria, from the coastal ranges in east Gippsland but with inland populations at Lerderderg Gorge (Melbourne) and north of Toongabbie (Victoria), and also in Nadgee Nature Reserve (far south coast of New South Wales).⁶⁵

1891 Yellow stringybark (*Eucalyptus muelleriana*)

Found in Bibbulmun Track guidebook section 5

*Eucalyptus muelleriana*⁶⁶ was formally described in 1891 by Alfred William Howitt⁶⁷ in *Transactions of the Royal Society of Victoria*.⁶⁸ The specific epithet honours German-Australian botanist Ferdinand von Mueller.⁶⁹

Howitt considered that the species should be placed between *E. engeniodies* (Thin-leaved or White stringybark)⁷⁰ and *E. capitellata* (Brown stringybark),⁷¹ noting that "It resembles both, but the dissimilarities are more marked than the resemblances". However, he was loath to declare it a separate species until he was able to compare his "samples with those in the collection of the Government Botanist", Baron von Mueller who granted him access to the collection. With the assistance of "Mr Luehmann"⁷² he rather gushily declared that "being fortified by the opinion of our greatest author, the venerable author of *Eucalyptographia*",⁷³ I may establish this *Eucalypt* as an independent species under the designation of *Eucalyptus muelleriana*."

E. muelleriana has been grown in Western Australian since at least the 1930s.



⁵³ During a field trip in the 1990s, I did hear the then head of the WA Department of Conservation and Land Management, Dr Syd Shea, refer to it as "Western Blue", but I suspect that was for the benefit of the Tasmanian representatives.

⁵⁴ *Eucalyptus globulus* subsp. *bicostata*.

https://en.wikipedia.org/wiki/Eucalyptus_globulus_subsp._bicostata (Note: The epithet "*bicostata*" is derived from the Latin "*bicostatus*" meaning "two-ribbed", referring to the buds and fruit.)

⁵⁵ *Eucalyptus bicostata* Maiden, Blakely & Simmonds. "Vascular Plants", Australian Plant Name Index.

https://biodiversity.org.au/nsl/services/rest/name/apni/59203/api/a_pni-format

⁵⁶ *Eucalyptus globulus* subsp. *maidenii*.

https://en.wikipedia.org/wiki/Eucalyptus_globulus_subsp._maidenii

⁵⁷ *Eucalyptus maidenii* F.Muell. "Vascular Plants", Australian Plant Name Index.

https://biodiversity.org.au/nsl/services/rest/name/apni/99076/api/a_pni-format

⁵⁸ Joseph Maiden. https://en.wikipedia.org/wiki/Joseph_Maiden

⁵⁹ *Eucalyptus globulus* var. *compacta* H.M.Hall. "Vascular Plants", Australian Plant Name Index.

https://biodiversity.org.au/nsl/services/rest/name/apni/61249/api/a_pni-format

⁶⁰ *Eucalyptus globulus* var. *bicostata* (Maiden, Blakely & Simmonds) Ewart "Vascular Plants", Australian Plant Name Index.

https://biodiversity.org.au/nsl/services/rest/name/apni/61249/api/a_pni-format

⁶¹ J.B Kirkpatrick, 1975. "Natural distribution of *Eucalyptus Globulus* Labill". *Australian Geographer*, Vol. 13(1).

www.tandfonline.com/doi/abs/10.1080/00049187508702675

⁶² *Eucalyptus globulus* subsp. *globulus*. EUCLID Eucalypts of Australia. https://apps.lucidcentral.org/euclid/text/entities/eucalyptus_globulus_subsp._globulus.htm

⁶³ *Eucalyptus globulus* subsp. *bicostata*. EUCLID Eucalypts of Australia. https://apps.lucidcentral.org/euclid/text/entities/eucalyptus_globulus_subsp._bicostata.htm

⁶⁴ *Eucalyptus globulus* subsp. *bicostata*. EUCLID Eucalypts of Australia. https://apps.lucidcentral.org/euclid/text/entities/eucalyptus_globulus_subsp._bicostata.htm

⁶⁵ *Eucalyptus globulus* subsp. *maidenii*. EUCLID Eucalypts of Australia. https://apps.lucidcentral.org/euclid/text/entities/eucalyptus_globulus_subsp._maidenii.htm

⁶⁶ *Eucalyptus muelleriana*.

https://en.wikipedia.org/wiki/Eucalyptus_muelleriana

⁶⁷ Alfred William Howitt.

https://en.wikipedia.org/wiki/Alfred_William_Howitt

⁶⁸ A.W. Howitt, 1890. "The Eucalypts of Gippsland", *Transactions of the Royal Society of Victoria*, Vol. II Part I, pp81-120 (with plates 8-16). www.biodiversitylibrary.org/item/54819#page/109

⁶⁹ Ferdinand von Mueller.

https://en.wikipedia.org/wiki/Ferdinand_von_Mueller

⁷⁰ *Eucalyptus engenoides*.

https://en.wikipedia.org/wiki/Eucalyptus_engenoides

⁷¹ *Eucalyptus capitellata*.

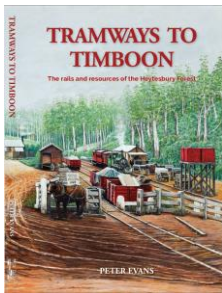
https://en.wikipedia.org/wiki/Eucalyptus_capitellata

⁷² Johann George Luehmann.

https://en.wikipedia.org/wiki/Johann_George_Luehmann

⁷³ Ferdinand von Mueller, 1879-1884. *Eucalyptographia. A Descriptive Atlas of the Eucalypts of Australia and the Adjoining Islands*. www.biodiversitylibrary.org/page/31734813

BOOKS AND PUBLICATIONS



Peter Evans, 2026. *Tramways to Timboon: The rails and resources of the Heytesbury Forest*. Light Rail Research Society of Australia, City VIC. ISBN 9780909340636. Hard cover, 180pp on art paper, A4 size, 61 maps and diagrams, 200 other illustrations, with bibliography, references, and index. \$66 (early bird until 4 Oct 2026 \$52.80).

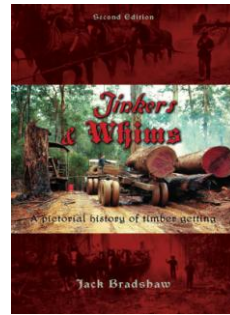
https://shop.lrrsa.org.au/product/tramways_to_timboon

From the publisher's notes.

The Heytesbury forest once occupied huge swathes of south-west Victoria, stretching from Warrnambool in the west to Lake Corangamite in the east, and south to the infamous shipwreck coast. A land primarily heavily-timbered, but with occasional open areas of grasstree plain and swampland, swarming with leeches in winter, snake infested in summer, and where not only the first settler was a pioneer, but their children and, as often, their grandchildren, after them.

Today, that forest exists as isolated remnants only, wiped out by the pressures of settlement. In the process of its destruction, resources such as timber, lime, coal and gravel were exploited to support the settlers and their surrounding communities. The key to that exploitation was a railway extended south from Camperdown to Timboon, completed in 1892. The reach of the railway was extended by a network of tramways which provided the only practical means of transport before the Country Roads Board began extending roads through the remnants of the forest. The result: where the forest once stood, are rolling green hills, and a thriving dairy industry.

This book outlines the processes and policies that used settlement and sawmills as the tool to clear the forest, and establish dairy farms and the other extractive industries that followed the railway. *Tramways to Timboon* recounts the history of the Timboon railway, the history of over 100 individual sawmills, as well as that of numerous lime works and quarry operations, many of which used tramways as an integral tool of development.



Jack Bradshaw, 2026. *Jinkers and Whims. A pictorial history of timber getting*. (Second (revised) edition.) Hesperian Press Perth WA. ISBN 9781923560307. 120pp with 120 photographs and illustrations. \$45 plus postage. <https://hesperianpress.com/index.php/booklist/2011-06-16-08-07-49/j-titles/1353-jinkers-and-whims>

From the publisher's notes.

Jinkers and Whims traces the development of the methods and machines used to harvest the forests of Western Australia, from first settlement to the present day, from horse and steam power to modern mechanical harvesters. It describes the bush workings and logging operations that underpinned WA's sawmilling industry – once the third largest industry behind wheat and wool. It is also a tribute to the bushmen and engineers who designed and built those weird and wonderful machines that were unique to the industry and to this part of the world.

This second revised edition contains 21 new photographs and new information that has come to light since the first edition was published in 2012.



Hazel Phillips, 2025. *Fire & Ice: Secrets, histories, treasures and mysteries of Tongariro National Park*. Massey University Press, Auckland, New Zealand. ISBN: 9781991016843. 400pp. <https://masseypress.ac.nz/products/fire-and-ice>

From the publisher's notes.

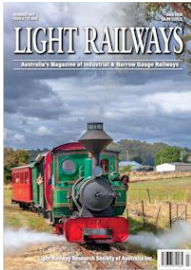
One woman's quest to uncover secrets in a mountain world

What lies off-track in Tongariro National Park? This engrossing book contains stories of ghosts, fires, avalanches, plane wrecks, sly grogging, secret spots and more from around Ngāuruhoe, Tongariro and Ruapehu – a place of wild and chaotic grandeur.

This well-illustrated and lively exploration of the history of Ruapehu is told by a self-confessed 'Ruapehu addict' who has an uncanny talent for persuading a cast of great characters to join her on her explorations and investigations. With more than 200 historic and present-day images and 25 maps, it's a must-have for all who love skiing, climbing and tramping around this mighty mountain.

Thanks to Michael Roche for advice of this book.

Light Railways: Australia's Magazine of Industrial & Narrow Gauge Railways, June 2026 (LR309) and August 2026 (LR310). Light Railway Research Society of Australia. ISSN: 0727 8101. www.lrrsa.org.au
www.facebook.com/people/lrrsa-Light-Railway-Research-Society-of-Australia-Inc/100064543968038

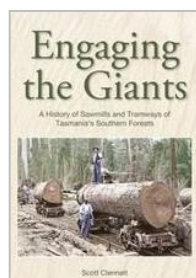


The lead article in LR309, "The locomotives of Kelly & Lewis" by Peter S. Evans (pp3-18) discusses the Melbourne engineering firm which built four diesel locomotives, described as "the most technologically advanced for their time". The first two locomotives – nos. 4271 (*The Pioneer*) and 5957 – were built for Rubicon

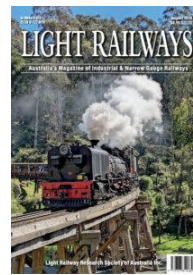
sawmillers Clarke & Pearce in 1935 and 1936 respectively. Both locomotives were used on the Rubicon Lumber & Timber Tramway Company until its closure in 1947 when they were relegated to shunting duties at the sawmill. Both locomotives were subsequently acquired by the Alexander Timber Tramway & Museum, where no. 5957 was named *Paul Simpson* after the man who had contributed to its survival. The discussion of Kelly & Lewis and timber tramways is from pp12-16, and has a number of photographs, including one on p12 of some timber trucks used on the Rubicon tramway.

More forest history is covered in a short article by Phil Rickard, "Long Journey for the Long Piles – Gray Bros" (pp33-35, including over two pages of photos and diagrams). The article discusses the contract awarded to the Gray Bros sawmillers of South Bruny Island to supply piles for the Admiralty Pier in Dover in the United Kingdom in the early 20th century. The piles were made from Tasmanian blue gum, and the photos show the trees being harvested, the preparation of the piles in the forest, their transport to barges in Norfolk Bay and elsewhere along some rough timber tramlines from the forest, and the construction of the pier.

An obituary of LRRSA member Scott Clennett is also included (p38). Scott was born into a Tasmanian sawmilling family in 1940, and spoke and wrote on the history of timber tramways, including in articles for the LRRSA and his 2016 book *Engaging the Giants: A History of Sawmills and Tramways of Tasmania's Southern Forests*. The LRRSA magazine will publish his final two articles in coming issues.



Further pieces related to forest history are advice that the LRRSA will be publishing books by Peter Evans, *Tramways to Timboon*, and Mike McCarthy, *The Tucker Truck Comes on Tuesdays*, on the timber tramways in the Erica and Gould areas of Victoria (p39), the former already published and the latter due in October, two letters on Timbertown in Wauchope (pp40 & 41, both with accompanying photos), and a short piece on the Alexandra Timber Tramway (pp44-45, also with accompanying photos).



LR310 includes article by Ian McNeil, "The Batar Creek Logging Tramway, near Kendall, NSW" (pp10-15).

Tony Coen provides a review of Tristan Joseph Verhoef's book *Peninsular Tramways: Tramways of Tasmania's Forestier & Tasman*

Peninsulas 1833-1976 (pp38-39). As stated in the advertisement for the book (p41), "Until the 1870s these tramways were associated with the convict era and were mostly used for timber getting, quarrying, and transporting coal from mines to jetties. From the 1870s to the 1930s there were many timber tramways, with gauges of up to 4 feet 6 inches."

Forest history is briefly mentioned in the article by Jim Longworth and Phil Rickard, "The tramways of Maria Island, Tasmania" (pp3-9), with passing references to timber cutting and timber (p3, p4 and p5). Similarly, the article on coal railways by Ross Mainwaring, "Invincible: white flour, black diamonds – Part 3" (pp16-24) refers to "A precaution with the 29U coal cutting machine was to wait till the timber men finished their work of erecting supportive timber in the bord."

A special Zoom meeting is being held on Thursday 10 September 2026 to discuss Mike McCarthy's new book, *The Tucker Truck Comes on Tuesdays*:

"The region to the north of Erica, Gippsland (Vic) was a major sawmilling centre in Victoria with magnificent stands of Mountain Ash available to be sent over the narrow-gauge railway to Moe. Centred around Mount Erica, the region was at its peak in the 1920s and 30s when the Tyers Valley timber was exploited and despatched to Collins Siding over the Erica Steel Tramway. The 1940s saw a resurgence when a massive program to salvage the 1939 fire-killed forest commenced. This saw the construction of the Thomson Valley Tramway and the introduction of the State Mill at Erica to deal with the log volumes coming from the north. The presentation will provide an overview of the mills and tramways that were such a feature of this region over this era."

(For details of how to take part, see <https://lrrsa.wildapricot.org/events> or <https://lrrsa.wildapricot.org/event-6712601>, but note that participation may be restricted to LRRSA members. Information on how to become a member is at <https://lrrsa.wildapricot.org/join-us>.)

Further references to forest and timber history are an advertisement for the new books by Peter Evans and Tristan Joseph Verhoef (p41) and the Alexander Timber Tramway (p44).

All back issues of *Light Railways* are available from the LRRSA's website shop.lrrsa.org.au – the most recent 12 issues can be bought for the cover price of \$8.95 each, or as PDFs for \$5.50 each. Earlier issues are out of print, but are available as free PDF downloads from the LRRSA website.